

limited to low intensity uses. Development standards are also recommended to reduce the amount of impervious surfaces and to protect existing natural features. A general Land Use Plan Map was also adopted, which provides a guide for orderly growth and development. Spring Lake adopted the Plan on July 27, 2009.

Cumberland County Land Use Policies Plan

Spring Lake, along with all the municipalities in the Cumberland County and Cumberland County have developed and adopted a land use policies plan which serves as a guide for development. This Plan contains location criteria for development relevant to hazard mitigation by limiting the type and intensity of development within the Special Flood Hazard Area. Spring Lake adopted the Plan on July 27, 2009.

Spring Lake Area Detailed Land Use Plan and Map - This detailed land use plan, adopted by the Spring Lake Board of Aldermen (adopted 09/03) and the Cumberland County Board of Commissioners, covers both the Town of Spring Lake and an Unincorporated Area of the County. The Plan addresses issues relevant to hazard mitigation, such as adequate storm drainage, expanding the scope of health and emergency services, code enforcement, protection of stream ways and water bodies, open space designation for the Special Flood Hazard Area along streams, rivers and drainage areas, and serve as a guide to orderly growth and development.

Spring Lake Twenty-Year Water and Sewer Capital Improvements Program - The Water and Sewer CIP provides a prioritized list of water and sewer projects scheduled for a twenty-year period. Provision of public infrastructure reduces the dependence upon wells and septic tanks, thus reducing the possibility of contamination during a hazard event and/or the recovery period.

2000 International Building Code with North Carolina Amendments - This Code provides specific standards for plumbing, building, mechanical and electrical construction, mandated by the State of North Carolina. This Code is under the jurisdiction of the North Carolina Department of Insurance and is enforced locally by the Cumberland County Planning and Inspections Department and the Spring Lake Inspections Department.

Spring Lake Stormwater Management Plan - The Stormwater Management Plan serves as a mechanism for managing stormwater runoff and drainage within the Town.

N.C. General Statutes 113A Article 4 Sedimentation Pollution control Act - This Act provides a mechanism to protect existing natural resources and the public health, safety and welfare through sedimentation and erosion control. The State of North Carolina administers permitting and enforcement measures for Cumberland County and the municipalities therein.

Cumberland County Emergency Operations Plan - Cumberland County prepared and adopted this Plan in order to reduce the vulnerability of people and property to a disaster and to provide an effective means of response in the event of a disaster. This Plan also includes an inventory of critical facilities (including the Town of Spring Lake) that would be impacted during a disaster. The Town of Spring Lake has adopted this Plan.

Mobility 2035 Long Range Transportation Plan - The Mobility 2035 Long Range Transportation Plan provides detailed planning and classifications for the road network within the Urban Planning Area (which includes Spring Lake) in order to provide adequate traffic movement and protect the public health, safety, and welfare. Classifications and design specifications are assigned to roads in order to ensure adequate right-of-way and design as transportation improvements are initiated.

Fayetteville Area Metropolitan Planning Organization - This Organization provides comprehensive transportation planning for the Metropolitan Planning Area in Cumberland County, including the Town of Spring Lake.

Sandhills Area Land Trust - The Sandhills Area Land Trust is a non-profit organization working with citizens, developers, local government, and landowners to preserve the natural resources and environment within the Sandhills. This organization is working with Cumberland County, as well as 6 other counties, to accept donations of land, arrange leases to protect special land holdings and works to negotiate conservation easements.

Cape Fear River Assembly - The Cape Fear River Assembly has a membership of approximately 400 and a 34-member Board of Directors representing 29 counties within the Cape Fear River Basin. The purpose of the Assembly is to provide the highest quality of life for residents within the Cape Fear River Basin through proper management of the Cape Fear River, its tributaries and adjacent land uses. The Lower Little River, which is a tributary of the Cape Fear River, runs through the Town

Sustainable Sandhills - This initiative, comprised of members of communities within 6 counties bordering Fort Bragg and Camp Mackall and the Military, is working to provide a model for regional sustainability planning. Sustainability planning focuses on balancing preservation of natural resources, economic development strategies, development, and Military operations. Cumberland County is represented within this initiative.

Joint Compatible Land Use Study 2003 - The purpose of this Study is to provide policies and implementation measures to mitigate conflicts between urban development and Military operations at Fort Bragg, Pope Air Force Base and Camp Mackall. Cumberland County is included within this Study.

Table 25 - Spring Lake Inventory of Local Ordinances, Policies and Programs Relevant to Hazard Mitigation

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
Town of Spring Lake Subdivision Ordinance 5/87	Section 155.45	To provide for existing or future drainage needed to protect public health, safety, and welfare.	MODERATE	This Ordinance establishes minimum development standards.	Establish detailed development standards.
Town of Spring Lake Subdivision Ordinance 5/87	Section 155.49	To provide standards for lots located within areas of special flood hazard.	HIGH	This Ordinance provides specific standards that address lots subject to flooding.	
Town of Spring Lake Subdivision Ordinance 5/87	Section 155.50 & 155.56	To provide standards for street design needed to protect the public health, safety, and welfare.	MODERATE	This Ordinance provides specific standards that address street design to accommodate drainage	Amend to require an additional entrance into developments, especially in special hazard areas, for rescue vehicles and evacuation routes.
Town of Spring Lake Subdivision Ordinance 5/87	Section 155.52 & 155.53	To provide standards for adequate physical separation of buildings to protect the public health, safety, and welfare.	HIGH	This Ordinance provides specific standards that address building separation.	
Town of Spring Lake Subdivision Ordinance 5/87	Section 155.54, 155.55, 155.56 & 155.67	To provide recreation and open space areas reducing the amount of impervious surfaces and protecting the natural environment.	HIGH	This Ordinance requires minimum amounts of land to be reserved and dedicated for open space based upon the type of residential development.	
Town of Spring Lake Zoning Ordinance 5/87	Section 156.085 & 156.086	To provide standards for adequate physical separation of buildings to protect the public health, safety, and welfare.	HIGH	This Ordinance provides specific standards that address building separation.	

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
Town of Spring Lake Mobile Home Park Ordinance 11/8/82	Section 153.31 & 1153.36	To provide standards for the location and design of mobile home parks needed to protect the public health, safety, and welfare.	HIGH	This Ordinance does not allow mobile home parks to be located within floodplain areas and has standards that address drainage, and physical separation.	
Stormwater Utility Ordinance 3/03	Section 152	To provide a means of managing stormwater.	HIGH	This Ordinance provides specific regulations for stormwater management and identification of problem areas.	
Water Supply Watershed Management & Protection Ordinance 5/5/93		To minimize the amount of stormwater runoff within Water Supply Watershed Areas and protect the public water quality as well as public health, safety, and welfare.	MODERATE	This Ordinance requires a Watershed Protection Building Permit and Watershed Occupancy Permit.	Amend to limit the amount of impervious surfaces within the Watershed Areas.
Flood Damage Prevention Ordinance 12/23/96		To minimize the public and private losses due to flood conditions in specific areas and to protect the public health, safety, and welfare.	HIGH	This Ordinance outlines general standards required in all special flood hazard areas and specific development standards required in all special flood hazard areas where base flood elevation data has been provided. A floodplain development permit is required.	

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
National Flood Insurance Program 5/4/00		To provide flood insurance for individuals within jurisdictions having membership in the program. Membership is based upon having floodplain management and development regulations. Compliance to the NFIP is the responsibility of the Town of Spring Lake Inspections Department.	HIGH	Member	
NCDOT Subdivision Roads Minimum Construction Standards 7/1/85	Minimum Design and Construction Criteria Section	To provide standards for the design, construction and maintenance of subdivision roads in order to protect the public health, safety, and welfare.	HIGH	This manual outlines specific design, construction and maintenance standards to mitigate potential flooding due to subdivision road construction.	
Minimum Design Standards Policy		To provide minimum design standards for development.	MODERATE	This policy is not part of the subdivision ordinance.	Amend the subdivision ordinance to include standards.
2030 Growth Vision Plan, Policies, and Actions 08/06/09	Pages 37-38	To protect the Special Flood Hazard Area. To reduce the amount of impervious surfaces.	MODERATE	The Plan recommends all development activities in the Special Flood Hazard Area be limited to low intensity uses such as open space, recreation, and adequately buffered agricultural activities.	
Cumberland County Land Use Policies Plan 08/06/09	Page 28	To protect the Special Flood Hazard Area.	MODERATE	The Plan recommends location criteria for development within the Special Flood Hazard Area.	

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
Spring Lake Area Detailed Land Use Plan 9/03	Page 55	To provide a Capital Improvement Program to ensure orderly expansion of public infrastructure and services, including storm drainage.	HIGH	This Plan provides recommendations for providing an adequate storm drainage system.	
Spring Lake Area Detailed Land Use Plan 9/03	Page 56	To provide adequate health and emergency services to all residents in the Study Area.	HIGH	This Plan recommends expanding the scope of existing health and emergency services.	
Spring Lake Area Detailed Land Use Plan 9/03	Page 56	To provide a variety of housing that protects the health, safety, and welfare of citizens.	HIGH	To promote the maintenance and preservation of existing housing through code enforcement and compliance programs.	
Spring Lake Area Detailed Land Use Plan 9/03	Page 57	To preserve and protect environmentally sensitive areas and natural resources.	HIGH	This Plan provides specific recommendations to identify and buffer stream ways and water bodies.	
Spring Lake Area Detailed Land Use Plan 9/03	Page 67	To protect the natural drainage system from urban encroachment.	HIGH	The Plan recommends an open space designation for the 100-year flood area along all streams, rivers and drainage areas with 10 feet on both sides without the 100-year flood designation.	
Spring Lake Area Detailed Land Use Plan Map 9/03	Page 68	To provide an orderly guide for growth and development to protect the public health, safety, and welfare.	HIGH	The Plan provides a land use plan map to guide future growth and development.	

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
Spring Lake Area Detailed Land Use Plan 9/03	Page 73	To provide an inventory of public assistance programs for funding options.	HIGH	This Plan provides options for funding public improvements such as drainage systems.	
Spring Lake Twenty- Year Water and Sewer Capital Improvements Program 8/99		To provide a prioritized list of water and sewer projects scheduled over a twenty-year period.	HIGH	This Program provides a planned course of action to provide public infrastructure.	
2000 International Building Code with N.C. Amendments		To provide specific construction standards to protect the public health, safety, and welfare.	HIGH	This Code provides specific standards for plumbing, building, mechanical and electrical construction.	
Spring Lake Stormwater Management Plan 3/4/00		To provide a mechanism to manage stormwater runoff and drainage to protect the public health, safety, and welfare.	HIGH	This Plan requires plan submittal, review, construction and monitoring of stormwater drainage facilities.	
N.C. General Statutes 113A Article 4 Sedimentation Pollution Control Act		To protect existing natural resources and the public health, safety, and welfare.	HIGH	This Act provides a mechanism for sedimentation and erosion control including permitting and enforcement measures.	

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
Cumberland County Emergency Operations Plan 2/22/02		To provide actions to reduce the vulnerability to a disaster and enhance the recovery from a disaster in order to protect the public health, safety, and welfare.	HIGH	This Plan provides actions to be taken to reduce the vulnerability of people and property to disaster, establishes an effective mechanism to respond in the event of a disaster and identifies critical facilities impacted during a disaster.	
Mobility 2035 Long Range Transportation Plan 04/22/09		To provide detailed planning for the road network within Cumberland County in order to protect the public health, safety, and welfare.	HIGH	This Plan provides technical details and classifications for collector streets, minor and major thoroughfares within the Urban Planning Area.	
Fayetteville Area Metropolitan Planning Organization		To provide comprehensive transportation planning for the Metropolitan Planning Area of Cumberland County in order to protect the public health, safety, and welfare.	HIGH	This Organization provides specific plans and technical support for all types of transportation planning, including road networks within the Metropolitan Planning Area.	
Sandhills Area Land Trust (SALT)		A non-profit organization working to preserve the natural beauty and environment of the Sandhills Region. Cumberland County is one of 7 counties working with SALT.	HIGH	This Organization works with citizens, developers, municipalities and landowners to retain the Region's unique environmental features and positively influence growth and development.	

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
Cape Fear River Assembly		To provide the highest quality of life within the Cape Fear River Basin.	HIGH	This Organization provides scientific study, economic analysis and education in order to make decisions regarding the proper management of the Cape Fear River, its tributaries and adjacent land uses.	
Sustainable Sandhills		To provide regional sustainability planning that preserves natural resources, enhances economic development and improves the quality of life for present and future generations.	HIGH	This Initiative, comprised of members of communities in 6 Counties bordering Fort Bragg and Camp Mackall and the Military, is working to provide a cooperative effort to provide a model for regional sustainability planning.	
Joint Compatible Land Use Study 2003		To provide policies and implementation measures to mitigate conflicts between urban development and Military operations on a Regional basis.	MODERATE	This Study provides compatibility measures and land use policy recommendations that have not been adopted.	Adopt the Land Use Study.

Overall, the local ordinances, policies and programs relevant to hazard mitigation are highly effective in terms of hazard mitigation. Several ordinances should be revised to provide stricter development standards and include specific recommendations contained within the 2030 Cumberland County Growth Vision Plan Policies, Actions, and Map, the Spring Lake Area Detailed Land Use Plan, and the Cumberland County Land Use Policies Plan.

Review of these existing plans, policies, ordinances and programs has resulted in specific actions to create new ordinances (or revise existing ordinances) that would serve to reduce the hazard vulnerability of the Town of Spring Lake. Land use, transportation, utility, recreation and capital improvement plans are designed to provide orderly growth and development without endangering the public health, safety and welfare. Preparation, review and revisions of these types of plans are a continuous process. Goals, Actions and information contained within this Hazard Mitigation Plan will be reviewed and incorporated into the planning process. Additionally, the five-year review of the Hazard Mitigation Plan will include an examination of existing plans, policies, ordinances and programs as part of the Capability Assessment as well as Mitigation Strategies.

Legal Capability

Local governments in North Carolina have been authorized by the State legislature to carry out four broad governmental powers: Regulation, Acquisition, Taxation and Spending. As mentioned previously, the Town of Spring Lake relies upon Cumberland County for regulatory and taxation staffing functions. The following is a summary of North Carolina enabling legislation granting these broad governmental powers relevant to hazard mitigation.

Regulation

General Police Power

All local governments in North Carolina have been granted broad regulatory powers in their jurisdictions. North Carolina General Statutes [NCGS] bestow the general police power on local governments, allowing them to enact and enforce ordinances, which define, prohibit, regulate or abate acts, omissions, or conditions detrimental to the health, safety, and welfare of the people and to define and abate nuisances (including public health nuisances).

Hazard mitigation can be included under the police power to protect the public health, safety, and welfare; therefore counties and municipalities may include requirements for hazard mitigation in local ordinances. Municipal governments may also use their power to abate nuisances, which could include by local definition, any activity or condition making people or property more vulnerable to any hazard [NCGS Chapter 160A, Article 8 Delegation and Exercise of the General Police Power to Cities and Towns].

Building Codes and Building Inspection

Counties and municipalities can engage in risk reduction measures focusing on strengthening building codes and requiring retrofitting of existing structures and facilities to protect the public health, safety, and welfare in the event of a natural hazard.

North Carolina has a State mandatory building code, which applies throughout the State [NCGS 143-138 (c)]. However, local jurisdictions may adopt codes for their respective jurisdictions if approved by the State as providing “adequate minimum standards” [NCGS 143-138 (e)]. Local regulations cannot be less restrictive than the State code. Exempted from the State code are public utility facilities other than buildings; liquefied petroleum gas and liquid fertilizer installations, and farm buildings outside municipal jurisdictions. No State permit may be required for structures under \$20,000. (Note that exemptions apply only to State, not local permits).

The State legislature has also empowered municipal governments to carry out building inspections. NCGS Chapter 160A, Article 19, Part 5 empower municipalities to create an Inspections Department, and enumerates its duties and responsibilities, which include enforcing State and local laws relating to the construction of buildings, installation of plumbing, electrical, heating systems, etc; building maintenance; and other matters.

Land Use

Through various land use regulatory powers, granted by the State, local governments can control the amount, timing, density, and location of new development. These growth characteristics can determine the level of vulnerability of an area in the event of a natural hazard. Land use regulatory powers include the power to engage in planning, enact and enforce zoning, subdivision, floodplain, stormwater and watershed ordinances.

Zoning

Zoning is the most basic tool available to control the use of land. The North Carolina General Statutes 160A-381 gives broad enabling authority for municipalities to use zoning as a planning tool. Counties may also regulate inside a municipal jurisdiction at the request of a municipality, as set forth in NCGS 160A-360(d). The statutory purpose for the grant of power is to promote the health, safety or the general welfare of the community. Land “uses” controlled by zoning include the type of use, such as residential, commercial, industrial, as well as minimum specifications for use such as lot size, building height, setback, density, etc.

Municipal governments are authorized to divide their territorial jurisdiction into districts, and to regulate and restrict the erection, construction, reconstruction, alteration, repair or use of buildings, structures, or land within those districts [NCGS 160A-382]. Districts may include general use districts, overlay districts, and special use districts or conditional use districts. Zoning ordinances consist of maps and written text.

Comprehensive or Master Planning

Within North Carolina, local governments are required to create or designate a planning agency in order to exercise the regulatory powers related to land use [NCGS 160A-387]. The planning agency may: prepare studies for an area/neighborhood; determine objectives; prepare and adopt plans for achieving objectives; develop and recommend policies, ordinances and administrative means to implement plans; and perform other related duties [NCGS 160A-361].

NCGS 160A-383 requires that zoning regulations be made in accordance with a comprehensive plan. While the ordinance itself may provide evidence that zoning is being conducted “in accordance with a plan,” the existence of a separate comprehensive planning document ensures that the government is developing regulations and ordinances that are consistent with the overall goals of the community.

Subdivision Regulation

Subdivision regulations control the division of land into parcels for the purpose of building a development or sale. Subdivision is defined as all divisions of a tract or parcel of land into two or more lots and all divisions involving a new street or a change in existing streets [NCGS 160A-376]. Flood-related subdivision controls typically require that developers install adequate drainage facilities and design water and sewer systems to minimize flood damage and contamination. They prohibit the subdivision of land subject to flooding unless flood hazards are overcome through filing or other measures, and they prohibit filling of floodway areas. Subdivision regulations require that subdivision plan be approved prior to the division of land. Subdivision regulation is limited in its ability to directly affect the type of use made of land or minimum specifications for structures.

Floodplain Regulation

The North Carolina legislature passed the “Act to Prevent Inappropriate Development in the One Hundred-Year Floodplain and to Reduce Flood Hazards” to regulate development within floodways [NCGS 143-214.51-214.61]. It serves as a risk reduction or risk elimination tool depending upon local government use. The purpose of this law is to minimize the extent of floods by preventing obstructions that inhibit water flow and increase flood height and damage; prevent and minimize loss of life, injuries, property damage and other losses in flood hazard areas; and promote the public health, safety, and welfare of citizens.

The statute directs, rather than mandates, local government to designate a one hundred-year floodplain; adopt local ordinances to regulate uses in flood hazard areas; enforce those ordinances; and grant permits for use in flood hazard areas that are consistent with the ordinance. The statute established minimum standards for local ordinances and provides for variances for prohibited uses such as:

(a) A flood hazard prevention ordinance adopted by a county or city pursuant to this part shall, at a minimum:

1. Meet the requirements for participation in the National Flood Insurance Program and of this section.
2. Prohibit new solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities in the 100-year floodplain except as noted in section (b) below.
3. Provide that a structure or tank for chemical or fuel storage incidental to a use that is allowed under this section or to the operation of a water treatment facility may be located in a 100-year floodplain only if the structure or tank is either elevated above base flood elevation or designed to be watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydro dynamic loads and the effects of buoyancy.

(b) A flood hazard prevention ordinance may include a procedure for granting variances for uses prohibited under G.S. 143-215.54.

(c) A county or municipality shall notify the Secretary of Crime Control and Public Safety of its intention to grant a variance at least 30 days prior to granting the variance. A variance may be granted upon finding that all of the following apply:

1. The use serves a critical need in the community.
2. No feasible location exists for the location of the use outside the 100-year floodplain.
3. The lowest floor of any structure is elevated above the base flood elevation or is designed to be watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy.
4. The use complies with all other applicable laws and regulations.

Also, the statute ensures that local ordinances meet the minimum requirements of participation in the National Flood Insurance Program (NFIP), which will afford residents the ability to purchase flood insurance through the NFIP. Additionally, communities with such ordinances will be afforded priority in the consideration of applications for loans and grants from the Clean Water Revolving Loan and Grant Fund.

Acquisition

Local governments can eliminate the risk of hazards through their power to acquire property, either in fee or lesser interest such as an easement. This removes the property from the private marketplace, thereby eliminating or reducing the possibility of inappropriate development. North Carolina legislation empowers municipalities to acquire property for public purpose by gift, grant, devise, bequest, exchange, purchase, lease or eminent domain [NCGS Chapter 160A Article 11].

Taxation

The power to levy taxes and special assessments has been delegated to municipal governments by the North Carolina legislature [NCGS 160A Article 9]. This power allows local governments to set preferential tax rates for areas unsuitable for development, such as wetlands, thereby discouraging development in hazardous areas. Local governments may also levy special assessments on property owners for all or part of the costs of acquiring, constructing, reconstructing, extending or otherwise building or improving beach erosion control, or flood and hurricane protection works within a designated area [NCGS 160A 238].

Spending

Counties and municipalities have been granted power to make expenditures in the public interest by the North Carolina General Assembly. An annual budget and a Capital Improvement Plan (CIP) can include hazard mitigation efforts. A CIP serves as a schedule for providing county or municipal services over a specified period of time. Committing to a timetable for the extension of facilities and services, local governments can effectively steer future growth and development and mitigate the impacts of natural hazards. The Town of Spring Lake does prepare an annual budget and does have a CIP for water and sewer.

Fiscal Capability

The North Carolina General Assembly has empowered municipalities to make expenditures in the public interest [NCGS 160A 475]. The primary source for funding these expenditures comes from property taxes. These revenues generally finance critical services available and delivered on a daily basis. Examples of these services include: public utilities, solid waste management, emergency services, health and social services, and schools. The Town of Spring Lake does not have available funds to support special projects such as hazard mitigation activities. Spring Lake looks to the following sources for hazard mitigation funding:

Government Funding

Federal and State funds are available to local governments for the development and implementation of hazard mitigation plans. These sources are listed below.

Federal Funding

Hazard Mitigation Grant Program (HMGP) - This program provides funding for hazard mitigation measures following a Presidential disaster declaration. Even though the Federal government supplies the majority of the funds for this program, the program is administered on the State level. HMGP funds can be used for projects such as acquisition or relocation, retrofitting, development of local mitigation standards and comprehensive mitigation plans, structural hazard control and the purchase of equipment to improve preparedness and response.

Pre Disaster Mitigation Program Grants (PDM) - Pre Disaster Mitigation Program provides funding to States and local jurisdictions for cost-effective hazard mitigation actions. FEMA provides PDM grants to States, that in turn, provide sub-grants to local governments for mitigation activities such as planning and the implementation of projects identified through the evaluation of natural and man-made hazards.

Flood Mitigation Assistance Programs - This program (FMAP) furnishes mitigation assistance to States, local jurisdictions and individuals to reduce or eliminate the long-term risk of flood damage to the built environment and real property. FMAP is available on an annual basis and eligibility is based upon a jurisdiction participating in the National Flood Insurance Program and developing a mitigation plan. These funds may be used for elevation and/or dry flood proofing of structures, acquisition of real property, relocation or demolition of structures, as well as other minor structural projects.

National Flood Insurance Program - Participation in this risk-sharing program requires jurisdictions to adopt and enforce floodplain management ordinances designed to reduce future losses.

Buy-Out Programs - Funding is available to buy back floodplains, relocate residents, and demolish structures in order to eliminate or reduce payouts for recurring flood damage.

Earthquake Hazard Reduction Grants - These funds are available to States having a moderate or high risk of seismic activity.

Community Development Block Grants - The Community Development Block Grant (CDBG) is designed to assist counties and municipalities in rehabilitating substandard dwelling units and to expand economic opportunities, primarily for low-to-moderate income families. Additionally, as a result of a Presidential declared disaster, CDBG funds may be used for long-term needs such as acquisition, reconstruction, and redevelopment of disaster-affected areas.

Small Business Administration (SBA) Pre-Disaster Mitigation Loan Program - The purpose of this program is to make low-interest, fixed-rate loans to eligible small businesses for the purpose of implementing mitigation measures to protect business property from damage that may be caused by future disasters. The program is a pilot program, which supports the Federal Emergency Management Agency (FEMA) Pre-Disaster Mitigation Program.

Ability to Pay - The North Carolina Department of Commerce has ranked the 100 counties in an economic tier system due to the Lee Quality Jobs and Business Expansion Act of 1966, which provides for a sliding scale of State tax credits for economic investment. This Act has become North Carolina's primary development tool in an effort to assist smaller rural counties become economically competitive. The most economically depressed counties are ranked in Tier 1 and the most economically prosperous are ranked in Tier 5. These rankings are evaluated annually based on (1) population growth, (2) unemployment rate, and (3) per capita income.

The tier ranking is widely used by the State as a measure of an individual county's ability to pay when applying for State and Federal grants. Cumberland County is ranked as a Tier 4 County.

Non-Government Funding

Another potential source of revenue for local mitigation efforts are the contribution of non-governmental organizations, such as churches, charities community relief funds, the American Red Cross, hospitals, for-profit businesses and non-profit organizations, such as nature conservancy and land trust organizations.

Technical Capability

The Town of Spring Lake has limited resources for technical staff. The Town relies on the following technical sources:

State and Federal Technical Assistance

Agencies such as the Federal Emergency Management Agency (FEMA) and the North Carolina Division of Emergency Management (NCDEM) have made available numerous implementation manuals and other resource documents. These manuals provide information on mitigation techniques for various hazards, including hurricanes, floods, wildfires, tornadoes and earthquakes. Additionally, they provide technical information on engineering principles, construction methods, costs and suggestions for how techniques can be financed and implemented. Federal agencies such as the U.S. Army Corps of Engineers and Soil Conservation Service also provide similar services.

Statewide Floodplain Mapping Initiative

The State of North Carolina, through the Federal Emergency Management Agency's Cooperating Technical Community partnership initiative, has been designated as a Cooperating Technical State (CTS). As a CTS, the State will assume primary ownership and responsibility for Flood Insurance Rate Maps (FIRM) for all North Carolina communities. This project included conducting flood hazard analysis and producing updated digital FIRM maps.

The State has acquired raw elevation data for the six eastern river basins, Cape Fear, Lumber, Neuse, Pasquotank, Tar-Pamlico, and White Oak, which will be used to develop Digital Elevation Models (DEMs) update flood hazard data. The updated flood hazard data provides current, accurate information for local jurisdictions and property owners to make sound site planning and design decisions when building new structures and infrastructure and retrofitting existing structures.

Local Technical Assistance

Cumberland County has a geographic information system (GIS) that provides essential information and technology for hazard response and mitigation. The GIS system provides detailed data on property ownership, land use type and location, values of property and structures, location of the Special Flood Hazard Area and other infrastructure.

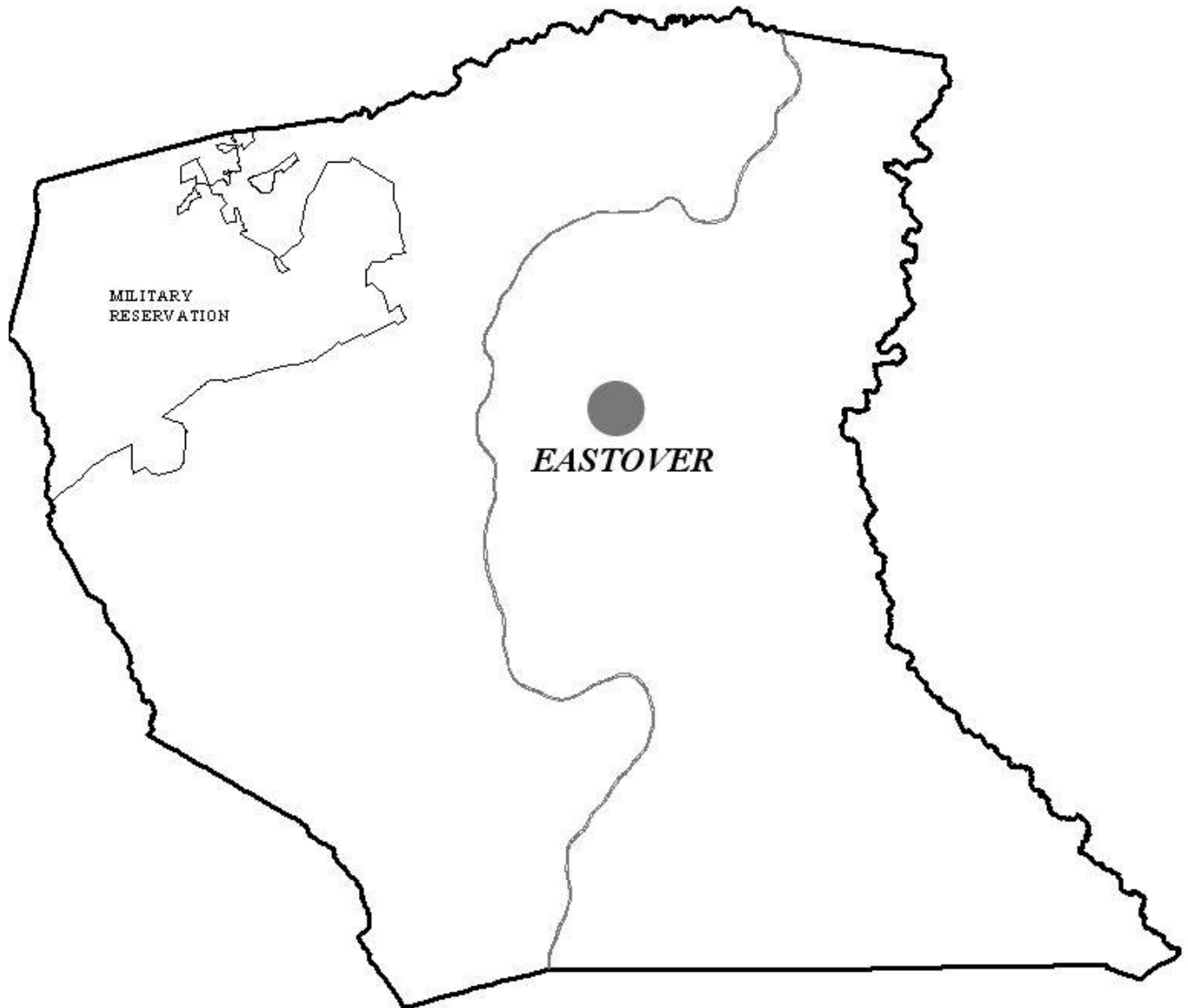
This system provides quick access and processing of detailed data that can be used to assist in deployment of resources, before, during and after a natural disaster, as well assists in planning for the mitigation of future disasters.

As previously mentioned in the Unincorporated Area Hazard Mitigation Plan Section entitled Local Departments, Agencies and Organizations, Spring Lake has access to a responsive and highly trained staff who are capable of implementing mitigation strategies, as well as educating the public about potential hazards and the process necessary to mitigate these hazards.

Political Capability

The Spring Lake Town Board of Aldermen is knowledgeable of the potential hazards faced by their respective jurisdictions, as well as past history of hazard events and recovery efforts. Additionally, the Cumberland County Joint Planning Board (serving Spring Lake) is aware of the importance of hazard mitigation planning. Due to this knowledge and understanding, the current and future political climates are expected to be favorable for supporting hazard mitigation strategies.

TOWN OF EASTOVER HAZARD MITIGATION PLAN



EASTOVER HAZARD MITIGATION PLAN

COMMUNITY PROFILE

The Town of Eastover is located in the central portion of the County on the eastside of the Cape Fear River. Consisting of approximately 11 square miles, the Town has a 2009 estimated population according to the North Carolina Office of Management and Budget is 3,798 persons. It is the youngest and the fourth most populous municipality in the County. The history of the Town goes back to the Scotch-Irish settlers in the Upper Cape Fear River Basin named Mary's Garden next to Cross Creek (now Fayetteville). The name Mary's Garden was given facetiously because the soil was very poor and produced very little crops. The Area was later named Flea Hill Township which got its name from an infestation of fleas in a local tavern. The N.C. General Assembly renamed the Flea Hill Township to Eastover Township in 1865. The Town of Eastover was incorporated in 2007 by the North Carolina General Assembly. Physically, the Town is located in an area that has hydric soil and has had some extensive canal constructed to drain the area. Many of these canals have since been blocked by overgrown vegetation, beavers, farming operations, etc. that leave a good portion of the area with hydric soils.

The Town has a Council-Manager form of government comprised of a mayor and six council members. The mayor serves a two year term and council members serve four year terms. The terms are staggered so that three seats are filled by election every two years. The Town Council appoints the Town Manager and Attorney. The Town Manager is the chief administrative officer and is responsible for all departments and services.

IDENTIFYING AND PROFILING HAZARDS

For this update the Technical Committee reviewed **Table A1 – Hazard Identification and Analysis and Table A2 – Summary by Hazard Vulnerability by Jurisdiction**. The Technical Committee determined the following hazards affect the Town of Eastover: hurricane, drought, thunderstorms, severe winter storms, tornadoes, extreme heat, wildfires, and earthquakes. Additionally, the Technical Committee focused on flooding since it is associated with and caused by other types of hazards, such as thunderstorms, hurricanes and tornadoes. Since Eastover was a part of the unincorporated area portion in the original document the profiling of hazards begins with the date of incorporation (July 26, 2007). Eastover has experienced one winter storm, and one extreme heat event from July 2007 – June 2010 per NOAA history profile of Local Storm Events. It is highly likely that thunderstorms and extreme heat events will occur in the future. Additionally, it is likely that Eastover will experience hurricanes, tornadoes, droughts, and severe winter storms. Flooding, wildfires and earthquakes are possible. Detailed information on each hazard type and their profile are contained in **Appendix A - Hazard Profile**.

MITIGATION STRATEGIES

For the purposes of this Mitigation Plan, Eastover has developed three (3) goals to serve as a basis for a more specific plan of action. The following goals are broad policy Statements aimed at guiding and directing future activity so that persons, property, government, and infrastructure are protected from the impacts of the natural hazards that affect the Town of Eastover.

GOAL #1

Reduce vulnerability of Cumberland County and its municipalities to all natural hazards for existing development, future development, redevelopment and infrastructure.

GOAL#2

Identify and protect all properties/natural resources that are at risk of damage due to a hazard and to undertake cost-effective mitigation measures to minimize losses.

GOAL#3

Improve public awareness, education and outreach programs for the natural hazards that Cumberland County and its municipalities are most likely to experience.

Within the following pages, mitigation actions for the Town of Eastover are listed and will identify the following information for each action:

- Hazard targeted – *Hazard the action is targeted to mitigate.*
- Goals addressed – *Goal(s) the action will address.*
- Document reference – *Ordinance(s), Policies or Programs that the action references, if any.*
- Whether it would be a new policy or continuation or an amendment to an existing policy
- Priority – *Each action ranked in terms of overall importance (high, moderate or low). Priorities were based upon the following criteria: cost-benefit, hazard identification and profile, vulnerability and capability assessments, and mitigation goals.*
- Funding sources – *List of funding source or potential funding source*
- How the action will mitigate the hazard
- How the action will reduce overall vulnerability
- Will the action be:
 - Cost effective – *Is a measure of how well the cost achieves the intended action.*
 - Environmentally Sound – *Is a determination if technology exists within the financial means of the jurisdictions that can achieve an action.*
 - Technically feasible *The actions has minimal or no harm to nature or the environment.*
- On-going, Short-term or Long-term Implementation - *On-going actions are those that currently exist and should be continued. Short-term actions are those that can be implemented within existing resources and should be accomplished within a time frame of six (6) months to two (2) years. Long-term actions will take additional resources or authorities and should be organized to begin implementation within a time frame of 3-5 years.*
- Person(s) or department responsible for the action – *Person(s) or Department(s) responsible for implementing the action.*
- Benchmark and indicator of progress – *Explains what needs to be accomplishment to meet this action.*
- Update – *Explains what has or has not been done to this action.*

The Hazard Mitigation Technical Committee looked at all the actions from the original Plan and the Updated Plan and considered the jurisdiction's cost of the action to be taken and their cost if no action is taken. In most cases it was determined that it was far less costly for the jurisdictions to take preventive action whenever possible than wait until a hazard occurred, therefore most of the actions taken are more preventive in nature. Most of the jurisdictions have limited financial resources to establish capital projects that address existing facilities vulnerable to the various hazards, such as relocating, removing, purchasing vulnerable properties; providing public water, or placing electrical lines underground. The

Hazard Mitigation Technical Committee determined that flooding was the most likely hazard to occur based on past records. Most of the past damage occurred on properties located in the Special Flood Hazard Area. Many of these properties are aged and through attrition and general decay will eventually be removed from the hazardous area. Preventive measures will keep new structures from being built in these areas.

ACTION 1: *Restrict Residential And Non-Compatible Uses Within The 100-Year Flood Area.*

Hazard Targeted	Flood
Goals Addressed	1; 2
Document Reference, if applicable	Cumberland County Zoning & Subdivision Ordinances
New, Continuation, Amendment	Completed October 2, 2007
Priority	High
Funding	Not Applicable

How the Action Will:

Mitigate the Hazard	Prohibit developing within the special flood hazard area and promote the flood area as an environmental corridor and open space area.
Reduce Overall Vulnerability	Limiting vulnerable types of development within the flood hazard area thus reducing potential losses during a flood.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Short-term
Person(s) or Department Responsible	Cumberland County Joint Planning Board
Benchmark and Indicator Of Progress	Town of Eastover adopted the Cumberland County Zoning Ordinance for its Town Limits. The County Zoning Ordinance includes CD (Conservancy District) that applies to the Special Flood Hazard Area and limits the type of permitted and special uses within the special flood hazard area. Adopted by the Town on October 2, 2007.

ACTION 2: *Increase The Lowest Floor Elevation To 2 Feet Above The Base Flood Elevation.*

Hazard Targeted	Flood
Goals Addressed	1; 2
Document Reference, if applicable	Flood Damage Prevention Ordinance
New, Continuation, Amendment	Completed November 5, 2007
Priority	High
Funding	Not Applicable

How the Action Will:

Mitigate the Hazard	Require new developments to be built at a higher elevation than what is currently required.
Reduce Overall Vulnerability	Reduce the vulnerability of existing and redevelopment projects because they would be required to meet the new elevation, if substantial improvements are made. Future development would be built at a higher elevation, further reducing the vulnerability. Reduce Flood Insurance premiums.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Short-term
Person(s) or Department Responsible	Cumberland County Engineering Department
Benchmark and Indicator Of Progress	Town of Eastover adopted the revised Cumberland County Flood Damage Prevention Ordinance that requires the lowest floor elevation to be 2 feet above the base flood elevation. Adopted on November 5, 2007.

ACTION 3: *Encourage The Use Of Cluster Type Development To Preserve Special Flood Hazard Areas.*

Hazard Targeted	Flood
Goals Addressed	1; 2
Document Reference, if applicable	Cumberland County Subdivision Ordinance (Zero Lot Line Development)
New, Continuation, Amendment	Completed
Priority	High
Funding	Not Applicable

How the Action Will:

Mitigate the Hazard	Preserve the special flood hazard area, while allowing property to be developed to its potential density.
Reduce Overall Vulnerability	Limit future development within the special flood hazard area.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	On-going
Person(s) or Department Responsible	Cumberland County Planning Department
Benchmark and Indicator Of Progress	The Cumberland County Subdivision Ordinance, in which the Town of Eastover adopted on October 2, 2007 includes the provision for Zero Lot Line Developments that allows developments to maximize their potential density and not encroach into the special flood hazard area.

ACTION 4: *Provide Incentives For Developers Willing To Use Environmentally Friendly Development Practices (Such As Preserving Open Space, Landscaping With Native Vegetation, Providing An Abundance Of Trees And Reduction Of Environmental Impact).*

Hazard Targeted	Flood, Extreme Heat
Goals Addressed	1; 2
Document Reference, if applicable	Cumberland County Subdivision Ordinance
New, Continuation, Amendment	Completed on October 2, 2007
Priority	Low
Funding	Not applicable

How the Action Will:

Mitigate the Hazard	Amount of vegetation would reduce flooding (less impervious surface) and provide shade to help shield from extreme heat.
Reduce Overall Vulnerability	Reduce flooding and exposure to extreme heat.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Long-term
Person(s) or Department Responsible	Cumberland County Planning Department
Benchmark and Indicator Of Progress	Cumberland County (Town of Eastover) has regulations in their Zoning and Subdivision Ordinances that permit environmentally friendly type developments. These ordinances included Density Developments-Conditional Use District, Zero Lot Line Developments, and Planned Neighborhood Developments-Conditional Use District.

ACTION 5: *Develop Uniform Flood Damage Prevention Ordinance.*

Hazard Targeted	Flood
Goals Addressed	1
Document Reference, if applicable	Cumberland County Flood Damage Prevention Ordinance
New, Continuation, Amendment	Delete
Priority	Medium
Funding	Not applicable

How the Action Will:

Mitigate the Hazard	Reduce the impact of development within special flood areas, thus reducing the amount of losses during a hazard event and maintain compliance with NFIP.
Reduce Overall Vulnerability	Limiting development within the flood hazard areas would reduce the losses during a hazard event.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Long-term
Person(s) or Department Responsible	Cumberland County Engineering Department
Benchmark and Indicator Of Progress	Even though the Cumberland County, City of Fayetteville and the Towns of Hope Mills and Spring Lake Flood Damage Prevention Ordinances are largely the same now, each of these jurisdictions preferred to maintain and enforce their own Flood Damage Prevention Ordinance. The Cumberland County Flood Damage Prevention Ordinance applies to all of the smaller municipalities (Towns of Eastover, Falcon, Godwin, Linden, Stedman and Wade) within Cumberland County. Also Cumberland County participated in the Community Rating System (CRS) whereas the City of Fayetteville and Towns of Hope Mills and Spring Lake at this time do not participate. The Technical Committee recommends that this action be deleted from Town of Eastover's actions.

ACTION 6: *Revise Subdivision Ordinance To Require That All Utilities Be Placed Underground With The Exception Of High Voltage Electrical Transmission Lines.*

Hazard Targeted	Multi-hazard (Flooding, Hurricanes, Tornadoes, Thunderstorms and Winter Storms)
Goals Addressed	1; 2
Document Reference, if applicable	Cumberland County Subdivision Ordinance
New, Continuation, Amendment	Completed
Priority	Medium
Funding	Not Applicable

How the Action Will:

Mitigate the Hazard	Reduce the overall impact of lost utility services and protect the public health, safety, and welfare.
Reduce Overall Vulnerability	Reduce damage cost, loss of service, and eliminate life-threatening situations to citizens and utility companies.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Short-term
Person(s) or Department Responsible	All Electrical Providers in Cumberland County
Benchmark and Indicator Of Progress	Cumberland County Subdivision Ordinance (adopted by the Town of Eastover on October 2, 2007) requires that all developments shall have utilities placed underground where practical. High voltage electrical lines are exempted from this requirement. Changed person(s) or Department Responsible to –All Electrical Providers in Cumberland County.”

ACTION 7: *Develop A Program To Identify And Eliminate Existing Development That Is Below The 100-Year Flood Elevation.*

Hazard Targeted	Flood
Goals Addressed	1; 2
Document Reference, if applicable	Not applicable
New, Continuation, Amendment	Continuation
Priority	Moderate
Funding	Cumberland County Community Development (HUD Funds), Cumberland County General Fund and the Hazard Mitigation Planning Grant (HMPG).

How the Action Will:

Mitigate the Hazard	The program will assist in the identification of those residents that are located in repeating flood prone areas and a process will be developed to assist in relocating those residents to a safer area. Additionally, non-residential structures will be identified within these areas and targeted for relocation.
Reduce Overall Vulnerability	Eliminate all structures that are prone to flooding.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Long-term
Person(s) or Department Responsible	Cumberland County Engineering Department, Cumberland County Planning Department, and Cumberland County Community Development Department
Benchmark and Indicator Of Progress	This information is provided to the County through NFIP and currently there are no building located below the Special Flood Hazard Area. This information will be monitor by the Cumberland County Engineering Department for the Unincorporated Area of the County and its participating jurisdictions, which includes the Town of Eastover.

ACTION 8: *Develop A Program To Ensure Drainage Ways, Culverts And Storm Drains Are Free Of Debris.*

Hazard Targeted	Flood
Goals Addressed	1; 2
Document Reference, if applicable	
New, Continuation, Amendment	Continuation
Priority	High
Funding	Stormwater Fund

How the Action Will:

Mitigate the Hazard	Regular maintenance of debris from drainageways, culverts and storm drains would provide the proper flow of water and reduce flooding.
Reduce Overall Vulnerability	Reduce vulnerability of flooding to streets, structures, and land located along drainageways, culverts and storm drains.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Long-term
Person(s) or Department Responsible	Cumberland County Engineering Department
Benchmark and Indicator Of Progress	No program has been developed for the Town of Eastover at this time. All streets within the Town of Eastover are maintained by NCDOT or privately maintained for those roads that are privately owned.

ACTION 9: *Limit The Amount Of Impervious Surfaces And Encourage The Use Of Pervious Type Surfaces.*

Hazard Targeted	Flood
Goals Addressed	1
Document Reference, if applicable	Cumberland County Zoning Ordinance, Cumberland County Subdivision Ordinance and the Water Supply Watershed Ordinance.
New, Continuation, Amendment	Completed on February 19, 2008
Priority	High
Funding	Not applicable

How the Action Will:

Mitigate the Hazard	Will limit the amount of impervious surface, which would reduce runoff and flooding.
Reduce Overall Vulnerability	Reduce vulnerability to existing and future development.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Long-term
Person(s) or Department Responsible	Cumberland County Planning Department
Benchmark and Indicator Of Progress	Cumberland County Zoning Ordinance (adopted by the Town of Eastover) allows non-residential uses with a structure or structures exceeding 20,000 square feet of floor area shall permanently surface 75% of parking area with the remaining 25% shall consist of a previous surface (Adopted by the County on February 19, 2008)

ACTION 10: *Develop A Landscape Ordinance That Will Encourage Protection Of Natural Areas Through Design And Provide More Vegetation In Urban Development.*

Hazard Targeted	Flood, Extreme Heat
Goals Addressed	1; 2
Document Reference, if applicable	Cumberland County Zoning Ordinance
New, Continuation, Amendment	Completed October 2, 2007
Priority	Moderate
Funding	Not applicable

How the Action Will:

Mitigate the Hazard	Provide more pervious area for natural drainage and provide reduction of extreme heat.
Reduce Overall Vulnerability	Reduce the vulnerability to localized flooding and extreme heat.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Long-term
Person(s) or Department Responsible	Cumberland County Planning Department
Benchmark and Indicator Of Progress	Cumberland County Zoning Ordinance (adopted by the Town of Eastover on October 2, 2007) landscaping requirements applies to non-residential and mix use developments (Adopted June 20, 2005 by the County)

ACTION 11: *Develop A Tree Ordinance To Address Clear Cutting, Protection Of Existing Trees And Vegetation.*

Hazard Targeted	Flooding, Extreme Heat
Goals Addressed	1; 2
Document Reference, if applicable	
New, Continuation, Amendment	Continuation
Priority	Low
Funding	Not applicable

How the Action Will:

Mitigate the Hazard	Provide more pervious area for natural drainage and tree canopy for shade and air quality.
Reduce Overall Vulnerability	Reduce the vulnerability to localized flooding and extreme heat.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Long-term
Person(s) or Department Responsible	Cumberland County Planning Department
Benchmark and Indicator Of Progress	At this time a tree ordinance addressing clear cutting has not been consider. The County landscape requirement encourages the protection of existing trees and vegetation and allows these trees and vegetation to be count towards meeting the standards. The County Landscape requirements are a part of the Zoning Ordinance.

ACTION 12: *Develop A Reforestation Program To Increase Vegetation Cover In Highly Urbanized Area And In Denuded Areas In Flood Prone Areas.*

Hazard Targeted	Flood, Extreme Heat
Goals Addressed	1; 2
Document Reference, if applicable	Erosion Pollution Control Act
New, Continuation, Amendment	Deferred
Priority	Low
Funding	Not applicable

How the Action Will:

Mitigate the Hazard	Reduce the amount of impervious surface and runoff.
Reduce Overall Vulnerability	Reduce flooding and exposure to extreme heat. In denuded areas the reforestation would reduce amounts of erosion and stabilize the soil from extreme runoff and wind.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Long-term
Person(s) or Department Responsible	U.S. Forest Service
Benchmark and Indicator Of Progress	The strategy of the Town of Eastover is to protect natural vegetation to enhance air quality, counteract extreme heat in urban areas and reduce sedimentation and pollution of waterways. Denuded areas were to be reforested by the public sector or non-profit organizations. Due to limited resources these efforts have been delayed. The Town's focus now is protecting as much existing vegetation as possible and requiring developments to plant additional vegetation. These efforts have been addressed by the adoption of a County Landscape Ordinance and the provision of development alternatives that protects vegetation and open space.

ACTION 13: *Develop A Greenway Program And Encourage Low Impact Uses In Those Areas As A Means To Protect Natural Areas Along Rivers, Streams, Creeks, And Drainage Ways.*

Hazard Targeted	Flood
Goals Addressed	1; 2
Document Reference, if applicable	Not applicable
New, Continuation, Amendment	Continuation
Priority	Moderate
Funding	Not applicable

How the Action Will:

Mitigate the Hazard	Provide buffer from urban encroachment.
Reduce Overall Vulnerability	Reduce flooding and erosion.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Long-term
Person(s) or Department Responsible	Local Jurisdictions and Cape Fear River Assembly
Benchmark and Indicator Of Progress	At this time a Greenway Plan has been developed inside the urban area of the County where density is the highest. As funds and resources become available extension to the rural area (including Town of Eastover) will be valid. Protection of rivers, streams, creeks and drainage ways is accomplished through the Cumberland County Flood Damage Prevention Ordinance that includes small stream standards for areas outside of the Special Flood Hazard Area along rivers streams, creeks and drain ways.

ACTION 14: *Revised Subdivision Ordinance Requiring Additional Access For Emergency Vehicles And To Be Used As An Evacuation Route For Developments Located Near Special Hazard Areas.*

Hazard Targeted	Multi-hazard (Flooding, Hurricanes, Tornadoes, Thunderstorms and Wildfires)
Goals Addressed	1; 2
Document Reference, if applicable	Cumberland County Subdivision Ordinance
New, Continuation, Amendment	Deferred
Priority	High
Funding	Not applicable

How the Action Will:

Mitigate the Hazard	Will provide an additional access for residents, public safety officials and emergency services to those developments located near a special hazard prone area.
Reduce Overall Vulnerability	Reduce the possibility of a life-threatening situation for residents, public safety and emergency services.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Short-term
Person(s) or Department Responsible	Cumberland County Planning Department
Benchmark and Indicator Of Progress	Currently Cumberland County Subdivision Ordinance (adopted by the Town of Eastover) does not require an additional access for evacuation route for developments located near special hazard areas. The Planning Board reviews the Subdivision Ordinance annually and could consider this action with its annual review.

ACTION 15: *Identify Areas That Are Susceptible To Wildfires And Consider Prescribed Fire (Controlling Burning) Management Tool To Reduce The Impact of Wildfire Hazards.*

Hazard Targeted	Wildfires
Goals Addressed	1; 2
Document Reference, if applicable	Not applicable
New, Continuation, Amendment	Deferred
Priority	High
Funding	Not applicable

How the Action Will:

Mitigate the Hazard	Provide a mechanism to limit the amount of damage to those areas susceptible to wildfires.
Reduce Overall Vulnerability	Reduce the amount of woodland that is lost to wildfires.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Long-term
Person(s) or Department Responsible	NC Forest Service
Benchmark and Indicator Of Progress	Currently the Cumberland County office of Forest Service has developed a draft risk assessment of those areas of Cumberland County (including the Town of Eastover) that are susceptible to wildfires. This risk assessment is general in nature and for in office use only. The NC Forest Service has completed five Community Wildfire Protection Plans for certain areas of Cumberland County.

ACTION 16: Continue To Protect Wetlands And Environmental Sensitive Corridors.

Hazard Targeted	Flood
Goals Addressed	1; 2
Document Reference, if applicable	Not applicable
New, Continuation, Amendment	Completed
Priority	Moderate
Funding	Not applicable

How the Action Will:

Mitigate the Hazard	Continue to prohibit urban encroachment from these areas.
Reduce Overall Vulnerability	The will allow the wetlands and corridors to function as they were intend to function.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	Long-term
Person(s) or Department Responsible	Corp of Engineers
Benchmark and Indicator Of Progress	The Corp of Engineers is responsible for the mapping and enforcements of the wetland regulations.

ACTION 17: Encourage All Rest Homes To Have A Reciprocal Agreement.

Hazard Targeted	Multi-hazard (Flooding, Hurricanes, Tornadoes, Thunderstorms and Wildfires)
Goals Addressed	2
Document Reference, if applicable	Not applicable
New, Continuation, Amendment	Completed
Priority	High
Funding	Not applicable

How the Action Will:

Mitigate the Hazard	Remove population from life threatening situations and provide them shelter during the recovery process.
Reduce Overall Vulnerability	Reduce losses of life and personal belonging.

Will the Action Be:

Cost Effective	Yes
Environmentally Sound	Yes
Technically Feasible	Yes

On-going, Short-term, Long-term Implementation	On-going
Person(s) or Department Responsible	Cumberland County Social Services Department
Benchmark and Indicator Of Progress	This reciprocal agreement currently exists with all the rest homes Located in Cumberland County (including Town of Eastover). The agreement is handled through Cumberland County Emergency Services.

IMPLEMENTATION

Plan implementation will start from the time that it is adopted. The Town of Eastover and the Cumberland County Planning & Inspections Department will be responsible for pursuing the development of policies, programs, ordinances, amendments, and regulations as they are assigned by the actions listed above. The Town is a member of the Cumberland County Joint Planning Board and contract for planning services with the Cumberland County Joint Planning Board. The Town has also adopted the County Zoning Ordinance, the County Subdivision Ordinance, the Stormwater Prevention Ordinance, and any other County development codes for implementation within the Town. The administration and implementation of these codes are carried out by the County Planning and Inspections Department and the County Engineering Department. The planning staff will prepare these planning documents, ensuring that the goals, objectives and strategies of these documents will be consistent with the Hazard Mitigation Plan and would not increase the hazard vulnerability or decrease hazard capability of Eastover. The Cumberland County Joint Planning Board (also serving on the Cumberland County Hazard Mitigation Steering Committee) would receive all planning documents for review and approval. Their comments will be forwarded to the Eastover Town Council for review and adoption. The public will have an opportunity to provide input at public hearings before these entities. It will be the responsibility of the Town Manager to ensure that these actions are carried out within the allocated time frame.

MONITORING, EVALUATING, AND REPORTING PROGRESS

Periodic monitoring and reporting of the Eastover Hazard Mitigation is required to ensure that the goals and objectives for the Town of Eastover are kept current and that local mitigation efforts are being carried out. The monitoring and reporting is to supplement the Plan within a five-year cycle. The Cumberland County Emergency Management Department will act as the contact and clearing house for relevant information.

The Plan shall be reviewed annually, unless a situation occurs making it necessary to review sooner (e.g. natural disasters, new FEMA maps—see Revisions and Updates). Eastover's Town Manager shall request that its Planning staff complete this annual review. The review will be coordinated with The Cumberland County Emergency Management Department. The report will be sent to the Cumberland County Joint Planning Board for review and a recommendation forwarded to the Eastover Town Council. The public will be given the opportunity to provide input at public hearings before the Cumberland County Joint Planning Board and the Eastover Town Council.

The annual report will include the following:

1. An evaluation of the effectiveness and appropriateness of the mitigation actions proposed in the Eastover Hazard Mitigation Plan.
2. A list of problems that have occurred in the implementation process.
3. Changes in Eastover's priorities.
4. Recommendations for changes, revisions, or amendments to the Plan.

The following questions will be helpful to Eastover in assessing their Hazard Mitigation Plan: (1) Do the goals and objectives address current and expected conditions; (2) Has the nature or magnitude of risks changed; (3) Are the current resources appropriate for implementing the Plan; (4) Are there implementation problems, such as technical, political, legal or coordination issues with other agencies/departments; (5) Have the outcomes occurred as expected; and (6) Did the agencies/departments and other partners participate in the Plan and planning process as proposed.

REVISIONS AND UPDATES

As updates occur, the date, reason and responsible party should be noted. Updates or revisions, which affect the Plan as a whole and impact any other jurisdiction(s), will require a presentation of findings and recommendation submitted to the jurisdiction(s) governing body for adoption.

At the end of every five-year cycle, the hazard mitigation taskforce will submit the hazard profile, vulnerability assessment and local capability assessment updates or revisions to FEMA and NCDEM for review. Increased development, increased exposure to certain hazards, the development of new mitigation capabilities or techniques and changes to Federal or State legislation are examples of changes that may affect the condition of the Plan. The updated Plan will then be forwarded to the Eastover Town Council for review and adoption. The public will be given the opportunity to provide input at public hearings before the Cumberland County Joint Planning Board and the Eastover Town Council. Copies of any revision, amendment or update to the Plan must be filed with the Eastover Town Clerk and Cumberland County Emergency Services Department as an update to the Cumberland County Multi-Jurisdictional Hazard Mitigation Plan and will be available to the public for review.

Resolution

WHEREAS, the Town of Eastover desires to remain eligible for the State and Federal disaster relief funds in the event of a declared disaster in the Town; and

WHEREAS, the Eastover town Council recognizes the value of having a Plan in place for identifying, prioritizing, and mitigating potential and real hazards that could affect the Town of Eastover; and

WHEREAS, the Cumberland County Joint Planning Board Staff, have prepared a Eastover Hazard Mitigation Plan as part of the Cumberland County Multi-Jurisdictional Hazard Mitigation Plan Update and have revised the Plan as suggested by the North Carolina Division of Emergency Management after its submittal to all appropriate government entities for review and comments; and

WHEREAS, the North Carolina Division of Emergency Management has endorsed the Eastover Hazard Mitigation Plan as part of the Cumberland County Multi-Jurisdictional Hazard Mitigation Plan Update; and

NOW, THEREFORE, BE IT RESOLVED by the Eastover Town Council that it adopts the Eastover Hazard Mitigation Plan as part of the Cumberland County Multi-Jurisdictional Hazard Mitigation Plan Update; and

BE IT FURTHER RESOLVED that the Town Council resolve to annually review the Plan and make revisions to all sections regarding the Town in the Cumberland County Multi-Jurisdictional Hazard Mitigation Plan Update when new data and information becomes available, as mitigation measures are achieved, and as mitigation strategies evolve; and

FURTHER, that the Town of Eastover may update and revise the Cumberland County Multi-Jurisdictional Hazard Mitigation Plan Update as it relates to Eastover but does not affect any other jurisdiction. If any revision, update or amendment involves another jurisdiction, the updates and revisions must be approved by the governing body of the affected jurisdiction. Copies of any revision, amendment or update to the Plan by the Town of Eastover must be kept on file with their Clerk and with the Cumberland County Emergency Services Department and added to the Cumberland County Multi-Jurisdictional Hazard Mitigation Plan Update; and

FURTHER, that administrative changes, wording corrections, the hazard analysis, and vulnerability assessment or other such portions of the Eastover Hazard Mitigation Plan as part of the Cumberland County Multi-Jurisdictional Hazard Mitigation Plan Update, do not require additional action by the Eastover Town Council.

Adopted 6th day of September, 2011

Attest:

Jane J. Faircloth
Town Clerk, Eastover

Charles H. Ramey
Mayor, Town of Eastover

VULNERABILITY ASSESSMENT

The assessment of the vulnerability of the population and facilities in the Eastover Hazard Mitigation Plan considered the type and location of development, the infrastructure, and public buildings. The entire Town has experienced some of the same hazards as the overall County : hurricanes, drought, hailstorms, thunderstorms, severe winter storms and extreme heat (see Identifying and Profiling Hazards and the Vulnerability Assessment for the overall County).The types of hazards and the areas they impact, relative to the Town of Eastover, are delineated in **Table A1 - Hazard Identification and Analysis** and **Table A2 - Summary of Hazard Vulnerability by Jurisdiction** located in **Appendix A - Hazard Profile**.

Current Conditions

Information compiled for the Town of Eastover through GIS, tax records, existing studies, zoning and subdivision regulations, past records, and data from other Federal, State and local agencies shows vulnerable facilities and special populations. Current conditions of this development and facilities are shown in **Table 26 - Eastover Private Buildings Vulnerability Assessment**. Data shows that there are currently 1,290 single-family dwellings valued at \$378,332,448 accommodating 3,419 persons; nine multi-family buildings valued at \$4,223,606 accommodating 204 persons; 54 commercial structures valued at \$31,353,172 impacting 250 persons; four industrial structures valued at \$1,696,724 impacting 46 persons; and 16 structures classified as other, valued at \$17,234,224 impacting 28 persons vulnerable to natural hazards in Eastover. In total, there are 1,373 private buildings valued at \$432,840,174 impacting 3,947 persons private structures vulnerable.

The critical facilities identified are listed in Appendix B – Critical Facilities Ranking. Critical facilities in the Town include infrastructure (such as streets, bridges, water and sewer lines, dams, etc.), a fire station, water tower, and government office as shown on **Map 22 - Eastover Critical Facilities Location**. The infrastructure data collected, as shown in **Table 27 - Eastover Public Buildings and Critical Facilities Vulnerability** data reveals seven sewage pump stations valued at \$2,800,000; five rest home structures valued at \$39,621,760 impacting 261 persons; 10 school structures valued at \$26,509,362 impacting 1,020 persons; three fire stations valued at \$1,690,794 impacting 27 persons; one government office valued at \$395,110 impacting two persons; approximately 392,576 linear feet of streets valued at \$74,196,864; 168,503_ feet of water lines valued at \$15,165,270; 100,418 feet of sewer lines valued at \$15,062,700; and 16 bridges with an estimated replacement cost of \$56,500,000. In total the number buildings and critical facilities vulnerable consist of 26 buildings valued at \$41,017,026 and infrastructure valued at \$160,924,834 impacting 1,310 persons. In summary, there are 1,399 buildings and infrastructure valued at \$634,782,034 impacting 5,257 persons vulnerable to natural hazards. Detailed information regarding the ranking of critical facilities relevant to Eastover is provided in Appendix B.

Eastover has approximately 693 acres of land in the designated special Flood Hazard Area. Data and a map showing the vulnerable facilities and structures are in **Table 28 - Eastover Private Buildings Flood Vulnerability Assessment**, **Table 29 - Eastover Public Buildings and Critical Facilities Flood Vulnerability Data**, and in **Map 23 - Eastover Facilities and Structures within the Special Flood Hazard Areas**. The Town participates in the National Flood Insurance Program. Presently, there are 89 private homes valued at \$34,535,368 impacting 236 persons and seven commercial structures valued at \$3,216,064 impacting 29 persons within the Special Flood Hazard Area. In total, there are 96 private buildings valued at \$37,751,432 impacting 265 persons within the Special Flood Hazard areas.

Public buildings and critical facilities in special Flood Hazard Area include one sewage pump station valued at \$400,000; 180 linear feet of sewer lines valued at \$27,000; 13,822 linear feet of streets valued at \$2,612,358; and six bridges valued at \$21,800,000. The total number of structures vulnerable to the

Special Flood Hazard Area in Eastover consists of one building valued \$400,000 and infrastructure valued at \$24,698,468.

In summary, there is a of total 97 buildings and infrastructure valued at \$62,849,900 impacting 265 persons vulnerable to the Special Flood Hazard Area in the Town of Eastover. Some buildings are included in the Flood Vulnerability Assessment, if the parcel of land the building is on intersects the Flood Area, even though these buildings are not within the Special Flood Hazard Area.

Vulnerable Populations

Special populations are vulnerable to natural hazards due to the lack of resources or control over certain variables necessary for recovery. These special populations include the elderly (persons over 75 year old), the disabled, non-English speaking persons, the institutionalized, households without telephones and vehicles, those below the poverty level, those living in high hazard areas, those living in certain mobile homes, and renters.

Development Trends and Projections

Development trends that may impact hazard mitigation include the direction of growth, current zoning and future land use. Eastover is bordered on the Bethany Area, Fayetteville, and north Town of Wade. The most recent development has been mostly rural type developments. Activities in the Town that may impact future development includes the Town's inability to annex to the west and southeast of the existing town limits. This is an agreement the Town of Eastover has with the City of Fayetteville not annex in those areas. Most of the area surrounding the Town is agricultural and farming. Eastover Sanitary District is currently installing water lines into areas outside of the Town and currently engineering the expansion of existing sewer in the southern portion of the Town. The completion of the Fayetteville Outer Loop from Ramsey Street to Highway 13/Goldsboro Road will impact the Town by providing quick access into the Fayetteville metro area. These actions will enhance the attractiveness of the Town for development.

Eastover is a zoned community. The zoning districts include agricultural, suburban density residential (two or less units per acre), low-density residential (greater than two units but less than six unit per acre), medium density residential (greater than six but less than 15 units per acre), office and institutional, commercial, and manufacturing districts. As shown on **Map 24 - Eastover Zoning Map**. Statistics shows that approximately 3,676 acres is zoned agricultural (A1) and 2,961 acres are zoned residential. A breakdown of the residential zoning classifications shows that approximately 2,638 acres of suburban density (RR, R30A, R30, R40A, and R40), 64 acres low density (R15 and R10) and 259 acres medium density (R6 and R6A). Further zoning statistics shows that there are 1.41 acres of office & institutional zoning (O&I), 406 acres of commercial zoning (CP, C2P, C3 and C1P) and 243 acres of manufacturing (MP).

The proposed land use for Eastover is shown on **Map 25 - Eastover Land Use Plan Map**. This map indicates the community's vision for the future use of land. According to the Plan approximately 354 acres are designated as open space, recreation and environmental corridor, 1,411 acres for agricultural, 4,659 acres for one acre residential lots, 240 acres as medium density residential, 173 acres of commercial, and 452 acres of activity node.

Projections for private buildings in Eastover in 2025 shows that there will be 1,565 single family dwellings, valued at \$458,945,456 impacting 4,148 persons; 11 multi-family structures valued at \$5,123,549 impacting 247; 66 commercial buildings valued at \$38,033,734 impacting 303 persons; five industrial structures valued at \$2,058,253 impacting 56 persons; and 19 other structures valued at \$20,906,398 impacting 34 persons. In total, there is projected in 2025 to be 1,666 private buildings

valued at \$525,067,390 impacting 4,788 persons in Eastover vulnerable. (See Appendix C-Methodology for projection method)

The number of projected number of private buildings in the Special Flood Hazard Areas in 2025 is 108 single family dwellings valued at \$4,893,975 impacting 286 persons and eight commercial buildings valued at \$3,901,325 impacting 35 persons. In total, there is projected to be 116 private buildings valued at \$45,795,301 impacting 321 persons in the Special Flood Hazard Area if no actions are taken. The implementation of mitigation actions in this document should reduce the number of these at risk properties.

The 2025 projected number of public buildings and critical facilities in special Flood Hazard Area include one sewage pump stations valued at \$485,230; 218 linear feet of sewer lines valued at \$32,753; 16,767 linear feet of streets valued at \$3,168,985; 3,492 linear feet of water lines valued at \$314,320; and seven bridges valued at \$26,445,025. In total, it is projected to be one building valued at \$485,230 and infrastructure and critical facilities valued at \$29,961,082 vulnerable.

In summary, it is projected by 2025 to be 118 buildings and infrastructure valued at \$76,241,613 impacting 321 persons subject to the Special Flood Hazard Area in Eastover. The Town of Eastover has not had any repetitive loss structures since its incorporation of July 2007.

Table 26 - Eastover Private Buildings Vulnerability Assessment

Hazard Type(s): Hurricane, Drought, Thunderstorms, Severe Winter Storms, Tornadoes, Extreme Heat, Wildfires, and Earthquakes

Current Conditions				Potential Future Conditions (Projection Year 2025)		
Type of Development	Number of Existing Private Buildings	* Current Value	Current Number of People	Projected Number of Private Buildings	Projected Value	Projected Number of People
Single-Family Residential	1,290	\$378,332,448	3,419	1,565	\$458,945,456	4,148
Multi-Family Residential	9	\$4,223,606	204	11	\$5,123,549	247
Commercial	54	\$31,353,172	250	66	\$38,033,734	303
Industrial	4	\$1,696,724	46	5	\$2,058,253	56
Other	16	\$17,234,224	28	19	\$20,906,398	34
Subtotal	1,373	\$432,840,174	3,947	1,666	\$ 525,067,390	4,788

* Values and building counts from County GIS - January 2010
The methodology used in preparing this data is described in Appendix C.

Table 27 - Eastover Public Buildings & Critical Facilities Vulnerability Assessment

Hazard Type(s): Hurricane, Drought, Thunderstorms, Severe Winter Storms, Tornadoes, Extreme Heat, Wildfires, and Earthquakes

Current Conditions				Potential Future Conditions (Projection Year 2025)		
Type of Development	Number of Existing Public Buildings & Critical Facilities	* Current Value	Current Number of People	Projected Number of Public Buildings	Projected Value	Projected Number of People
Sewage Pump Stations	7	\$2,800,000	0	8	\$3,396,609	0
Water Towers	0	\$0	0	0	\$ 0	0
Hospitals/Rest Homes	5	\$9,621,760	261	6	\$11,671,912	317
Schools	10	\$26,509,362	1,020	12	\$32,157,832	1,237
Infrastructure (roads, bridges, drainage, dams, and etc.)	Water Lines – 168,503' Sewer Lines 100,418' Streets – 392,576' Bridges - 16	\$15,165,270 \$15,062,700 \$74,196,864 \$56,500,000	N/A	Water Lines – 204,407' Sewer Lines – 121,815' Roads – 476,224' Bridges - 19	\$18,396,603 \$18,272,178 \$90,006,326 \$68,538,711	N/A
Police Stations	0	\$0	0	0	\$0	0
Fire Stations	3	\$1,690,794	27	4	\$2,051,059	33
Hazard Materials Facilities	0	\$0	0	0	\$0	0
Government offices	1	\$395,110	2	1	\$479,298	2
Emergency Shelters	0	\$0	0	0	\$0	0
Public Housing	0	\$0	0	0	\$0	0
Subtotal	Buildings - 26 Infrastructure	\$41,017,026 \$160,924,834	1,310	Buildings - 32 Infrastructure	\$49,756,710 \$195,213,817	1,273
TOTAL:	Buildings – 1,399 & Infrastructure	\$634,782,034	5,257	Buildings – 1,697 & Infrastructure	\$770,037,917	6,377

- * Values and building counts from County GIS – January 2010
The methodology used in preparing this data is described in Appendix C.
3 Included in government offices

Table 28- Eastover Private Buildings Flood Vulnerability Assessment

Hazard Type(s): Flood

Current Conditions				Potential Future Conditions (Projection Year 2025)		
Type of Development	Number of Existing Private Buildings	* Current Value	Current Number of People	Projected Number of Private Buildings	Projected Value	Projected Number of People
Single-Family Residential	89	\$34,535,368	236	108	\$41,893,975	286
Multi-Family Residential	0	\$0	0	0	\$0	0
Commercial	7	\$3,216,064	29	8	\$3,901,325	35
Industrial	0	\$0	0	0	\$0	0
Other	0	\$0	0	0	\$0	0
Subtotal	96	\$37,751,432	265	116	\$45,795,301	321

* Values and building counts from County GIS - January 2010
The methodology used in preparing this data is described in Appendix C.

Table 29 - Eastover Public Buildings & Critical Facilities Flood Vulnerability Assessment

Hazard Type(s): Flood

Current Conditions				Potential Future Conditions (Projection Year 2025)		
Type of Development	Number of Existing Public Buildings & Critical Facilities	* Current Value	Current Number of People	Projected Number of Public Buildings	Projected Value	Projected Number of People
Sewer Pump Station	1	\$ 400,000	0	1	\$ 485,230	0
Water Towers	0	\$ 0	0	0	\$ 0	0
Hospitals/Rest Homes	0	\$ 0	0	0	\$ 0	0
Schools	0	\$ 0	0	0	\$ 0	0
Infrastructure (roads, bridges, drainage, dams, etc.)	Water Line – 2,879' Sewer Lines - 180' Streets – 13,822' Bridges - 6	\$259,110 \$27,000 \$2,612,353 \$21,800,000	N/A	Water Lines – 3,492' Sewer Lines - 218' Streets – 16,767' Bridges - 7	\$314,320 \$32,753 \$3,168,985 \$26,445,025	N/A
Police Stations	0	\$0	0	0	\$0	0
Fire Stations	0	\$0	0	0	\$0	0
Hazard Materials Facilities	0	\$0	0	0	\$0	0
Government offices	0	\$0	0	0	\$0	0
Emergency Shelters	0	\$0	0	0	\$0	0
Public Housing	0	\$0	0	0	\$0	0
Subtotal	Buildings - 1 Infrastructure	\$400,000 \$24,698,468	0	Buildings - 1 Infrastructure	\$485,230 \$29,961,082	0
TOTAL:	Buildings - 97 & Infrastructure	\$62,849,900	265	Buildings - 118 & Infrastructure	\$76,241,613	321

* Values and building counts from County GIS - January 2010
The methodology used in preparing this data is described in Appendix C.

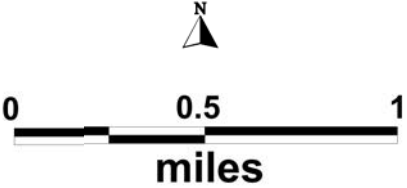
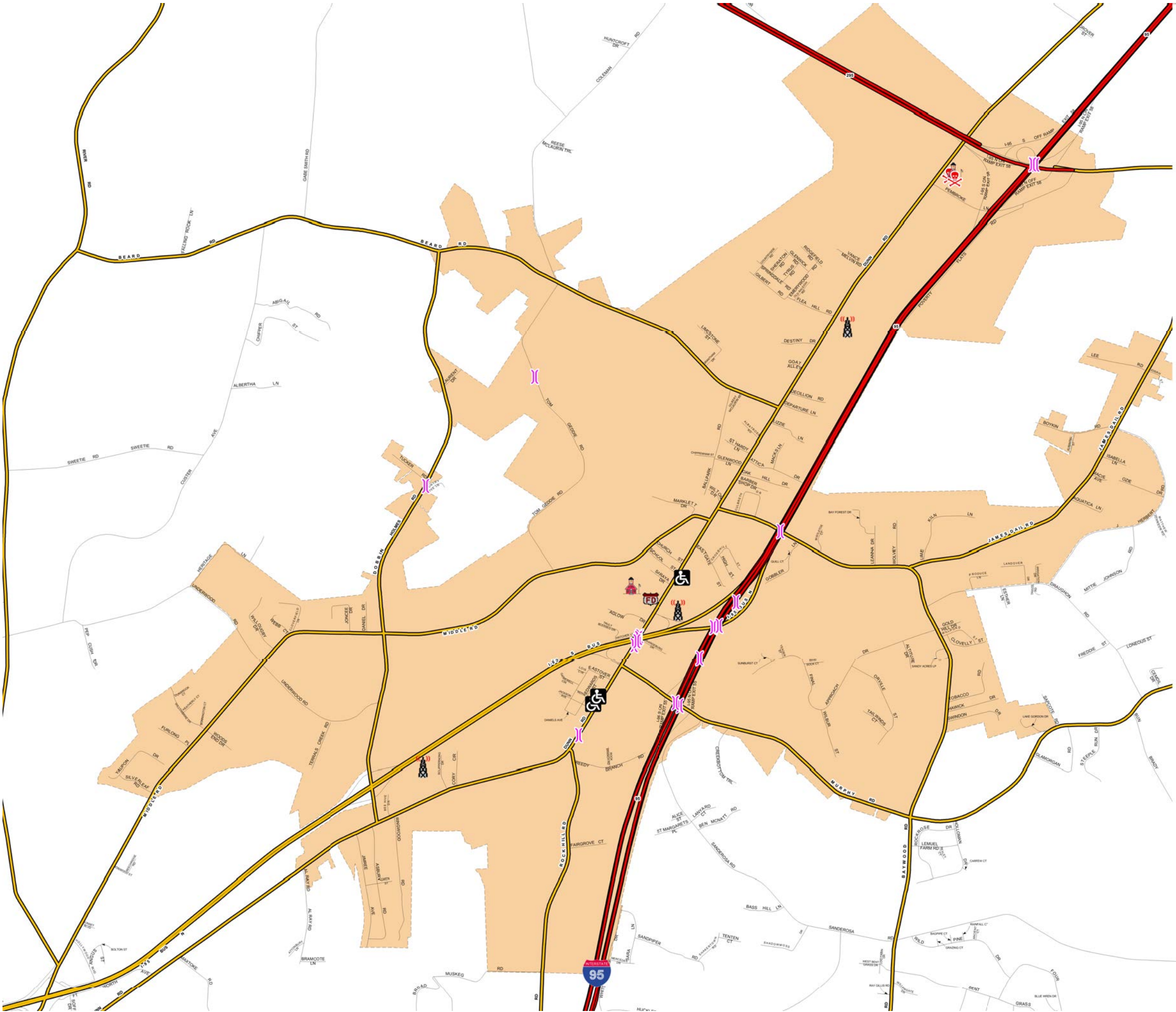
Map 22

Town of Eastover

Critical Facilities

Legend

-  Cell Tower
-  Hazardous Materials
-  Water Tower
-  Bridge
-  Emergency Shelter
-  Fire Department
-  Public School
-  Municipal Boundary
-  Streams-Rivers
-  Lakes
-  Dams
-  Resthome



Map 23

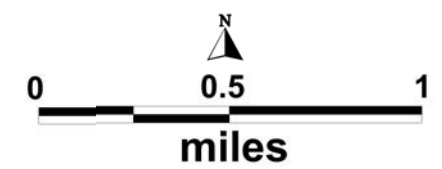
Town of Eastover

Critical Facilities

Special Flood Hazard Area

Legend

-  Bridge
-  Municipal Boundary
-  Streams-Rivers
-  Lakes
-  Special Flood Hazard Area



MAP 24

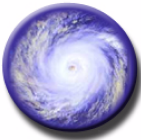
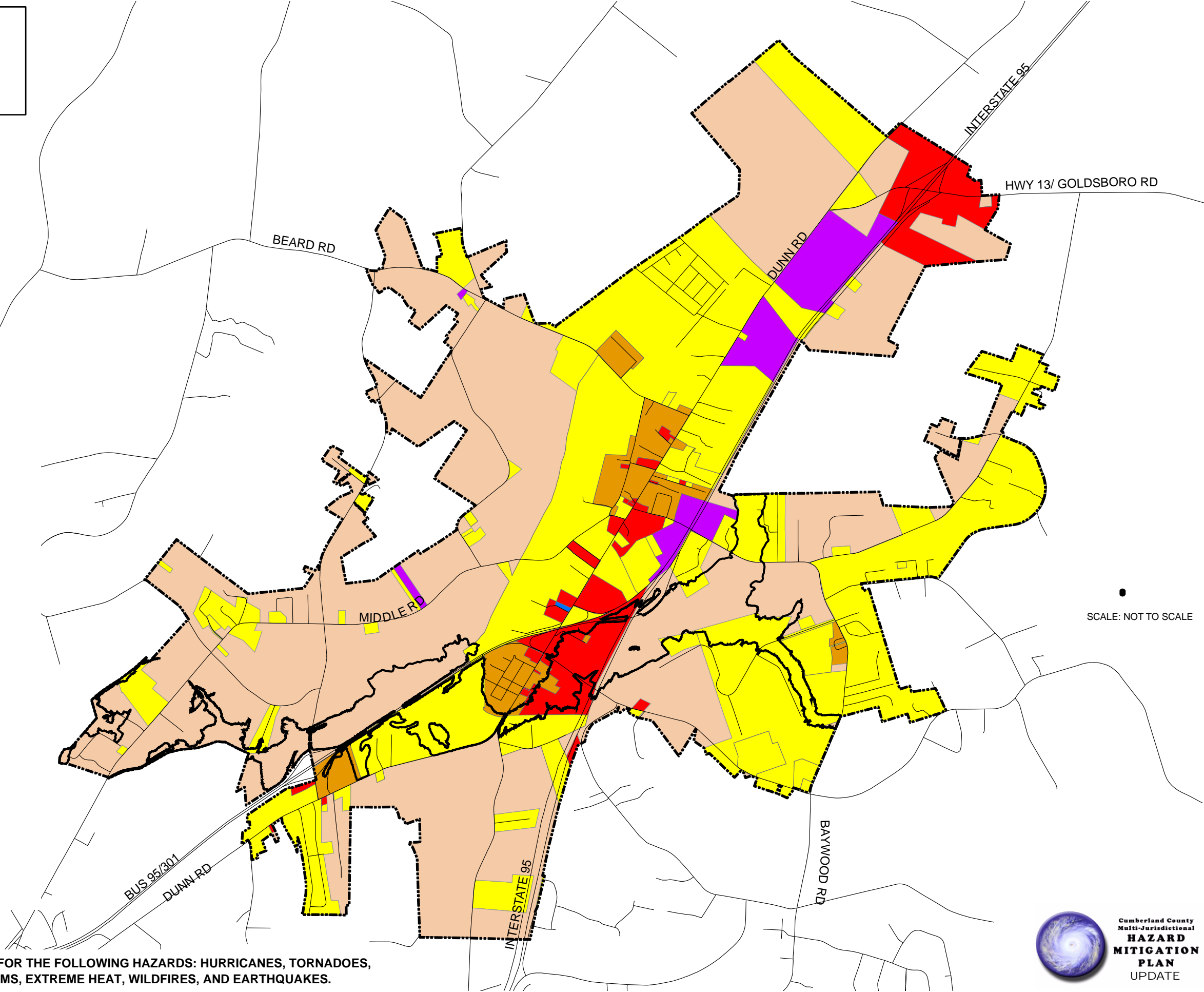
TOWN OF EASTOVER

ZONING MAP

Legend

- SPECIAL FLOOD HAZARD AREA
- MUNICIPAL BOUNDARY
- A1 - AGRICULTURAL DISTRICT
- R40 - RESIDENTIAL DISTRICT
- R40A - RESIDENTIAL DISTRICT
- R30 - RESIDENTIAL DISTRICT
- R30A - RESIDENTIAL DISTRICT
- RR - RESIDENTIAL DISTRICT
- R15 - RESIDENTIAL DISTRICT
- R10 - RESIDENTIAL DISTRICT
- R6 - RESIDENTIAL DISTRICT
- R6A - RESIDENTIAL DISTRICT
- O&I(P) - OFFICE & INSTITUTIONAL
- C(P) - PLANNED COMMERCIAL
- C2(P) - PLANNED COMMERCIAL
- C1(P) - PLANNED COMMERCIAL
- C3 - COMMERCIAL DISTRICT
- M(P) - PLANNED INDUSTRIAL

NOTE: ALL OF THE TOWN OF FALCON IS DESIGNATED FOR THE FOLLOWING HAZARDS: HURRICANES, TORNADOES, THUNDERSTORMS, DROUGHTS, SEVERE WINTER STORMS, EXTREME HEAT, WILDFIRES, AND EARTHQUAKES.









Cumberland County
Multi-Jurisdictional
HAZARD
MITIGATION
PLAN
UPDATE

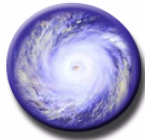
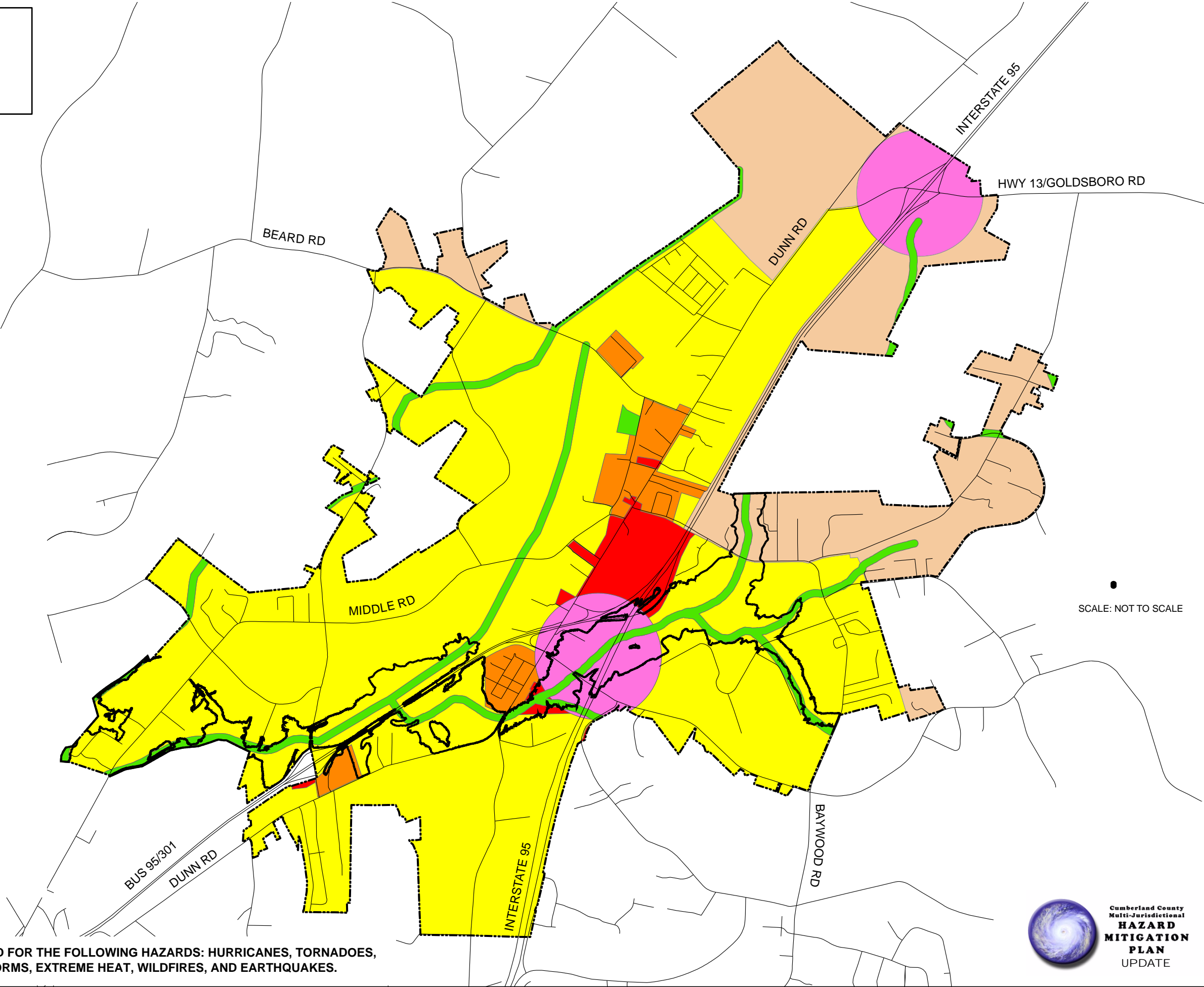
MAP 25

TOWN OF EASTOVER
LAND USE PLAN MAP

Legend

-  SPECIAL FLOOD HAZARD AREA
-  MUNICIPAL BOUNDARY
-  FARMLAND
-  ONE ACRE RESIDENTIAL LOTS
-  MEDIUM DENSITY RESIDENTIAL
-  ACTIVITY NODE
-  HEAVY COMMERCIAL
-  OPEN SPACE

NOTE: ALL OF THE TOWN OF FALCON IS DESIGNATED FOR THE FOLLOWING HAZARDS: HURRICANES, TORNADOES, THUNDERSTORMS, DROUGHTS, SEVERE WINTER STORMS, EXTREME HEAT, WILDFIRES, AND EARTHQUAKES.



Cumberland County
Multi-Jurisdictional
**HAZARD
MITIGATION
PLAN**
UPDATE

CAPABILITY ASSESSMENT

Local Departments, Agencies and Organizations

The Town of Eastover operates under the Manager/Council form of government and employs a Manager, Town Clerk, and a part-time maintenance worker. Cumberland County EMS and the Eastover Volunteer Fire Department also provide emergency services. Water service is provided by the Eastover Sanitary District (ESD), the Town of Wade Water System, the Fayetteville Public Works System, and individual wells. Sewer service is provided by the Eastover Sanitary District and individual septic tanks. The Town does not provide any trash pickup service, although residents can subscribe to private haulers in the area or they can take their trash to a nearby County Container Site. The Towns contract with other agencies for most of their services. These services include police protection, planning & inspections, parks and recreation, tax collection, and fire service.

Eastover Volunteer Fire Department - The primary mission of the Eastover Volunteer Fire Department is to provide fire protection. It also provides education to the public about public hazards, the dangers of fire, and assistance to improve the control of and elimination of these hazards. The Eastover Volunteer Fire Department operates out of Station Number One located on Dunn Road and S.R. 1728 in the Town. Its service area is bordered on the west by the Cape Fear River, to the north by the Wade Fire District, on the south by the Vander Fire District, and on the south by the Bethany Fire District.

Inspections Services - The Inspections services are contracted with the Cumberland County Planning & Inspections Department. This County Department provides inspections for the Town, taking into account public safety, health, and general welfare, through administration and enforcement of the North Carolina State Building Codes and other related Town ordinances within the Town's jurisdiction.

Planning Services - The Cumberland County Planning & Inspections Department is charged with the responsibility of administering the general planning ordinances, subdivision ordinances, zoning ordinances, and nuisance ordinances designed to protect the public health, safety and welfare, by maintaining quality growth within the Town.

Police Protection Service - The Cumberland County Sheriff's Department provides professional law enforcement service to the Town to protect and safeguard lives and property, prevent crime and provide police service to every person within the Town of Eastover. Police protection is provided by a contractual agreement for service within the Town from 8:00am through 5:00pm. Coverage of the Town from 5:00pm through 8:00am is provided by routine patrol of the Sheriff's Office within the rural zone of the County that includes the Town.

Recreation and Parks Service - The Fayetteville/Cumberland Parks and Recreation Department provides the citizens within the Town of Eastover with an improved quality of life through the implementation of planned leisure activities for children, adults, and senior adults. This department provides planning, construction and the daily operations and maintenance of the recreation facilities and parks.

In addition, the following County Departments provide services to the Town residents: Cumberland County EMS provides emergency services. Cumberland County Animal Control, Health, Mental Health, Social Services, provide public health and human services; County Engineering administers the Flood Damage Prevention Ordinance; and the County Tax Administration Department collects applicable taxes, fees and assessments for the Town.

There are numerous State and Local Agencies and Organizations that provide services relevant to hazard mitigation for Eastover residents. A complete list was presented within the Cumberland County Capability Assessment above.

Policy and Program Capability

This section includes the identification and evaluation of existing ordinances, policies, and programs that are relevant to the Town of Eastover's vulnerability to natural hazards. This inventory consists of specific mitigation initiatives, their effectiveness and strategies to improve mitigation effectiveness. Additionally, this information is contained within **Table 30 - Eastover Inventory of Local Ordinances, Policies and Programs Relevant to Hazard Mitigation**.

Most of the actions in the original Mitigation Plan that require ordinance revisions or policy changes have been completed and/or adopted. The Planning Staff currently has an ongoing process of rewriting, updating (zoning and subdivisions) and creating new ordinances for several of the local jurisdictions, including Town of Eastover. These ordinances already comply with many of the mitigation actions that the local jurisdictions have already endorsed. Those actions that have not been completed are more developer resistance and cost prohibit. The Technical Committee will continue educating citizens, elected officials and the development community concerning our mitigation efforts and actions.

Eastover Subdivision Ordinance - The Town of Eastover Subdivision Ordinance is the same as Cumberland County's which contains several sections that are relevant to hazard mitigation. These sections address specific design standards that mitigate hazards such as drainage, flooding and fire.

Eastover Zoning Ordinance - The Eastover Zoning Ordinance is the same as Cumberland County's which addresses hazard mitigation by providing standards for physical separation of structures and yard space.

Cumberland County Stormwater Utility Ordinance - The Eastover Stormwater Utility Ordinance provides specific regulations for stormwater management.

Cumberland County Water Supply Watershed Management and Protection Ordinance - The Water Supply Watershed Management and Protection Ordinance are designed to minimize the amount of stormwater runoff and to protect the public water quality within the Cape Fear River Watershed Area Class WS-IV and the Cross Creek Watershed Area Class WS-IV. In addition to portions of Cumberland County falling within the Watershed Areas, a portion of the Town of Eastover fall within the Watershed Area Class WS-IV. This Ordinance has been adopted by the Town.

Flood Damage Prevention Ordinance - Cumberland County has developed and adopted a Flood Damage Prevention Ordinance designed to minimize the public and private losses due to flood conditions in specific areas and to protect the public health, safety and welfare. The Town of Eastover adopted this ordinance, which establishes the requirements for elevation and flood proofing (non-residential) to base flood elevation and a development permit.

National Flood Insurance Program and Community Rating System - The National Flood Insurance Program (NFIP) provides flood insurance to individuals in local jurisdictions that are members of the program. Membership in the Program is based upon the adoption and enforcement of floodplain management and development regulations. Compliance of the NFIP for the Unincorporated Area, Eastover, Falcon, Godwin, Linden, Stedman and Wade is responsibility of the Cumberland County Engineering Department. They maintain the Cumberland County flood maps and Flood Damage Prevention Ordinance and issue Floodplain Development Permits for those jurisdictions in accordance with compliance of NFIP. An element of the NFIP is the Community Rating System (CRS), which adjusts flood insurance premiums relative to a local jurisdiction's investment in flood damage mitigation. Inclusion in the CRS involves submitting a local jurisdiction's floodplain management procedures for evaluation.

NCDOT Subdivision Roads Minimum Construction Standards - The North Carolina Department of Transportation has established minimum construction standards for new subdivision roads (to be dedicated as public or private). According to North Carolina General Statutes, all new subdivision roads connecting to the State system must obtain a construction permit from a Division of Highways District Engineer and must meet these construction standards. Standards relevant to hazard mitigation include: surface and subsurface drainage, bridges, roadway dams, and specifications for design and construction to accommodate emergency vehicles.

2030 Cumberland County Growth Vision Plan Policies, Actions, and Map

Cumberland County, along with all the municipalities in the County adopted this land use plan which serves as a guide for development. This Plan contains several recommendations relevant to hazard mitigation. The Plan recommends the provision of open space/environmental corridors along rivers and major water features, which reduces the amount of development within and adjacent to the floodplain and protects the natural riparian cover adjacent to these water features. Recommendations also include using environmental corridors as a network of greenways connecting recreation and school facilities with natural areas. The Plan recommends all development activity within the Special Flood Hazard Area be limited to low intensity uses. Development standards are also recommended to reduce the amount of impervious surfaces and to protect existing natural features. A general Land Use Plan Map was also adopted, which provides a guide for orderly growth and development. Eastover adopted the Plan on August 4, 2009.

Cumberland County Land Use Policies Plan

Eastover, along with all the municipalities in the Cumberland County and Cumberland County have developed and adopted a land use policies plan which serves as a guide for development. This Plan contains location criteria for development relevant to hazard mitigation by limiting the type and intensity of development within the Special Flood Hazard Area. Eastover adopted the Plan on August 4, 2009.

Eastover Area Detailed Land Use Plan and Map - This detailed land use plan, adopted by the the County Board of Commissioners prior to the Town's incorporation was adopted by the Eastover Town Council on October 2, 2007. The Plan addresses issues relevant to hazard mitigation, such as adequate storm drainage, expanding the scope of health and emergency services, code enforcement, protection of stream ways and water bodies, open space designation for the Special Flood Hazard Area along streams, rivers and drainage areas, and serve as a guide to orderly growth and development.

2000 International Building Code with North Carolina Amendments - This Code provides specific standards for plumbing, building, mechanical and electrical construction, mandated by the State of North Carolina. This Code is under the jurisdiction of the North Carolina Department of Insurance and is enforced locally by the Cumberland County Planning and Inspections Department.

N.C. General Statutes 113A Article 4 Sedimentation Pollution control Act - This Act provides a mechanism to protect existing natural resources and the public health, safety and welfare through sedimentation and erosion control. The State of North Carolina administers permitting and enforcement measures for Cumberland County and the municipalities therein.

Cumberland County Emergency Operations Plan - Cumberland County prepared and adopted this Plan in order to reduce the vulnerability of people and property to a disaster and to provide an effective means of response in the event of a disaster. This Plan also includes an inventory of critical facilities (including the Town of Eastover) that would be impacted during a disaster. The Town of Eastover has also adopted this Plan.

Mobility 2035 Long Range Transportation Plan - The Mobility 2035 Long Range Transportation Plan provides detailed planning and classifications for the road network within the Urban Planning Area (which includes a large portion of Eastover) in order to provide adequate traffic movement. Classifications and

design specifications are assigned to roads in order to ensure adequate right-of-way and design as transportation improvements are initiated.

Fayetteville Area Metropolitan Planning Organization - This Organization provides comprehensive transportation planning for the Metropolitan Planning Area in Cumberland County, including the Town of Eastover.

Sandhills Area Land Trust - The Sandhills Area Land Trust is a non-profit organization working with citizens, developers, local government, and landowners to preserve the natural resources and environment within the Sandhills. This organization is working with Cumberland County, as well as 6 other counties, to accept donations of land, arranges leases to protect special land holdings and works to negotiate conservation easements.

Cape Fear River Assembly - The Cape Fear River Assembly has a membership of approximately 400 and a 34-member Board of Directors representing 29 counties within the Cape Fear River Basin. The purpose of the Assembly is to provide the highest quality of life for residents within the Cape Fear River Basin through proper management of the Cape Fear River, its tributaries and adjacent land uses.

Sustainable Sandhills - This is an organized non-profit organization comprised of members of communities within 6 counties bordering Fort Bragg and Camp Mackall and the Military, and has expanded to 5 additional counties, is working to provide a model for regional sustainability planning. Sustainability planning focuses on balancing preservation of natural resources, economic development strategies, development, and Military operations within the Sandhills Region. Cumberland County is represented within this initiative.

Joint Compatible Land Use Study 2003 - The purpose of this Study is to provide policies and implementation measures to mitigate conflicts between urban development and Military operations at Fort Bragg, Pope Air Force Base and Camp Mackall. Cumberland County is included within this Study.

Table 30 - Eastover Inventory of Local Ordinances, Policies and Programs Relevant to Hazard Mitigation

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
Town of Eastover Subdivision Ordinance 10/2/07	Section 2303 E(2)	To provide for existing or future drainage needed to protect public health, safety, and welfare.	MODERATE	This Ordinance establishes minimum development standards.	Establish detailed development standards.
Town of Eastover Subdivision Ordinance 10/2/07	Section 2303 G	To provide standards for lots located within areas of special flood hazard.	HIGH	This Ordinance provides specific standards that address lots subject to flooding.	
Town of Eastover Subdivision Ordinance 10/2/07	Section 2304	To provide standards for street design needed to protect the public health, safety, and welfare.	MODERATE	This Ordinance provides specific standards that address street design to accommodate drainage	Amend to require an additional entrance into developments, especially in special hazard areas, for rescue vehicles and evacuation routes.
Town of Eastover Subdivision Ordinance 10/2/07	Section 2301	To provide standards for adequate physical separation of buildings to protect the public health, safety, and welfare.	HIGH	This Ordinance provides specific standards that address building separation.	
Town of Eastover Subdivision Ordinance 10/2/07	Section 2308	To provide recreation and open space areas reducing the amount of impervious surfaces and protecting the natural environment.	HIGH	This Ordinance requires minimum amounts of land to be reserved and dedicated for open space based upon the type of residential development.	
Town of Eastover Subdivision Ordinance 10/2/07	Section 2306 -B	This ordinance specifies the location, supply, maintenance, and design criteria of fire hydrants	HIGH	This ordinance insures the adequate location of fire hydrants to provide fire suppression service to the general public.	Reduces risk of contamination caused by flooding

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
Town of Eastover Subdivision Ordinance 10/2/07	Section 2306 A	To provide the installation of public water and sewer systems	HIGH	This ordinance provides the installation of public water and sewer systems for a healthier environment.	Reduces the risk of real property, and reduces costs to homeowners to properly insure their homes
Town of Eastover Subdivision Ordinance 10/2/07	Section 2303-G	To provide standards for development on lots subject to flooding	HIGH	This ordinance provides standards for lot that may be subject to flooding , and states requirements for development located along watercourses to prevent obstruction in watercourse4s and storm drainage systems	Reduces the risk to real property, and reduces costs to homeowners to properly insure their homes
Town of Eastover Subdivision Ordinance 10/02/07	Section 2307	This ordinance states the requirement to clear all drainage ways, supplemented by various other ordinances of the Town.	HIGH	This ordinance provides for the clearance of obstructions within all drainage ways, thereby allowing the free flow of natural streams and stormwater.	Reduces the possibility of flooding to adjoining properties and downstream areas.
Town of Eastover Subdivision Ordinance 10/02/07	Section 2306-C	This ordinance provides standards for the underground installation of all utilities within new development.	HIGH	This ordinance provides assurance that infrastructure services interruptions due to acts of man or nature are kept at a minimum.	Reduces the possibility of power outages that could affect dependant and vulnerable citizens.
Town of Eastover Zoning Ordinance 10/2/07	Section 1101 A	To provide standards for adequate physical separation of buildings to protect the public health, safety, and welfare.	HIGH	This Ordinance provides specific standards that address building separation.	

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
Town of Eastover Zoning Ordinance 10/2/07	Section 302	To preserve and protect identifiable natural resources from urban encroachment by establishing a limited number of allowable land uses	HIGH	This ordinance provides a specific list of permitted uses allowed within the CD-Conservation District. Additionally, the ordinance provides a list of specified conditional uses that may be approved by the Board of Adjustment.	
Water Supply Watershed Management & Protection Ordinance 10/02/07		To minimize the amount of stormwater runoff within Water Supply Watershed Areas and protect the public water quality as well as public health, safety, and welfare.	MODERATE	This Ordinance requires a Watershed Protection Building Permit and Watershed Occupancy Permit.	Amend to limit the amount of impervious surfaces within the Watershed Areas.
Flood Damage Prevention Ordinance 11/5/07		To minimize the public and private losses due to flood conditions in specific areas and to protect the public health, safety, and welfare.	HIGH	This Ordinance outlines general standards required in all special flood hazard areas and specific development standards required in all special flood hazard areas where base flood elevation data has been provided. A floodplain development permit is required.	

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
National Flood Insurance Program 6/23/09		To provide flood insurance for individuals within jurisdictions having membership in the program. Membership is based upon having floodplain management and development regulations. Compliance to the NFIP is the responsibility of the Cumberland County Engineering Department.	HIG H	Member	
NCDOT Subdivision Roads Minimum Construction Standards 10/02/07	Minimum Design and Construction Criteria Section	To provide standards for the design, construction and maintenance of subdivision roads in order to protect the public health, safety, and welfare.	HIGH	This manual outlines specific design, construction and maintenance standards to mitigate potential flooding due to subdivision road construction.	
Minimum Design Standards Policy 10/02/07		To provide minimum design standards for development.	MODERATE	This policy is not part of the subdivision ordinance.	Amend the subdivision ordinance to include standards
2030 Growth Vision Plan, Policies, and Actions 07/29/10	Pages 37-38	To protect the Special Flood Hazard Area. To reduce the amount of impervious surfaces.	MODERATE	The Plan recommends all development activities in the Special Flood Hazard Area be limited to low intensity uses such as open space, recreation, and adequately buffered agricultural activities.	

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
Cumberland County Land Use Policies Plan 07/29/10	Page 28	To protect the Special Flood Hazard Area	MODERATE	The Plan recommends location criteria for development within the Special Flood Hazard Area	
Eastover Area Detailed Land Use Plan 12/16/2000	Page 82	To provide a Capital Improvement Program to ensure orderly expansion of public infrastructure and services, including storm drainage.	HIGH	This Plan provides recommendations for providing an adequate storm drainage system.	
Eastover Area Detailed Land Use Plan 12/16/2000	Page 90	To preserve and protect environmentally sensitive areas and natural resources.	HIGH	This Plan provides specific recommendations to identify and buffer stream ways and water bodies.	
Eastover Area Detailed Land Use Plan 12/16/2000	Page 82	To protect the natural drainage system from urban encroachment.	HIGH	The Plan recommends an open space designation for the 100-year flood area along all streams, rivers and drainage areas with 10 feet on both sides without the 100-year flood designation.	
Eastover Area Detailed Land Use Plan Map 12/16/2000	Page 91	To provide an orderly guide for growth and development to protect the public health, safety, and welfare	HIGH	The Plan provides a land use plan map to guide future growth and development.	
2000 International Building Code with N.C. Amendments		To provide specific construction standards to protect the public health, safety, and welfare.	HIGH	This Code provides specific standards for plumbing, building, mechanical and electrical construction.	

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
N.C. General Statutes 113A Article 4 Sedimentation Pollution Control Act		To protect existing natural resources and the public health, safety, and welfare.	HIGH	This Act provides a mechanism for sedimentation and erosion control including permitting and enforcement measures.	
Cumberland County Emergency Operations Plan 11/01/09		To provide actions to reduce the vulnerability to a disaster and enhance the recovery from a disaster in order to protect the public health, safety, and welfare.	HIGH	This Plan provides actions to be taken to reduce the vulnerability of people and property to disaster, establishes an effective mechanism to respond in the event of a disaster and identifies critical facilities impacted during a disaster.	
Mobility 2035 Long Range Transportation Plan 04/22/09		To provide detailed planning for the road network within Cumberland County in order to protect the public health, safety, and welfare.	HIGH	This Plan provides technical details and classifications for collector streets, minor and major thoroughfares within the Urban Planning Area.	
Fayetteville Area Metropolitan Planning Organization		To provide comprehensive transportation planning for the Metropolitan Planning Area of Cumberland County in order to protect the public health, safety, and welfare.	HIGH	This Organization provides specific plans and technical support for all types of transportation planning, including road networks within the Metropolitan Planning Area.	

TITLE & ADOPTION DATE	DOCUMENT REFERENCE	PURPOSE & DESCRIPTION	MITIGATION EFFECTIVENESS	RATIONALE FOR EFFECTIVENESS	MITIGATION STRATEGY
Sandhills Area Land Trust (SALT)		A non-profit organization working to preserve the natural beauty and environment of the Sandhills Region. Cumberland County is one of 7 counties working with SALT.	HIGH	This Organization works with citizens, developers, municipalities and landowners to retain the Region's unique environmental features and positively influence growth and development.	
Cape Fear River Assembly		To provide the highest quality of life within the Cape Fear River Basin.	HIGH	This Organization provides scientific study, economic analysis and education in order to make decisions regarding the proper management of the Cape Fear River, its tributaries and adjacent land uses.	
Sustainable Sandhills		To provide regional sustainability planning that preserves natural resources, enhances economic development and improves the quality of life for present and future generations.	HIGH	This Initiative, comprised of members of communities in 6 Counties bordering Fort Bragg and Camp Mackall and the Military, is working to provide a cooperative effort to provide a model for regional sustainability planning.	
Joint Compatible Land Use Study 2003		To provide policies and implementation measures to mitigate conflicts between urban development and Military operations on a Regional basis.	MODERATE	This Study provides compatibility measures and land use policy recommendations that have not been adopted.	Adopt the Land Use Study.

Overall, the local ordinances, policies and programs relevant to hazard mitigation are highly effective in terms of hazard mitigation. Several ordinances should be revised to provide stricter development standards and include specific recommendations contained within the Eastover Area Detailed Land Use Plan, 2030 Cumberland County Growth Vision Plan Policies, Actions and Map, and the Cumberland County Land Use Policies Plan.

Review of these existing plans, policies, ordinances and programs has resulted in specific actions to create new ordinances (or revise existing ordinances) that would serve to reduce the hazard vulnerability of the Town of Eastover. Land use, transportation, utility, recreation and capital improvement plans are designed to provide orderly growth and development without endangering the public health, safety and welfare. Preparation, review and revisions of these types of plans are a continuous process. Goals, Actions and information contained within this Hazard Mitigation Plan will be reviewed and incorporated into the planning process. Additionally, the five-year review of the Hazard Mitigation Plan will include an examination of existing plans, policies, ordinances and programs as part of the Capability Assessment as well as Mitigation Strategies.

Legal Capability

Local governments in North Carolina have been authorized by the State legislature to carry out four broad governmental powers: Regulation, Acquisition, Taxation and Spending. As mentioned previously, the Town of Eastover relies upon Cumberland County for regulatory and taxation staffing functions. The following is a summary of North Carolina enabling legislation granting these broad governmental powers relevant to hazard mitigation.

Regulation

General Police Power

All local governments in North Carolina have been granted broad regulatory powers in their jurisdictions. North Carolina General Statutes [NCGS] bestow the general police power on local governments, allowing them to enact and enforce ordinances, which define, prohibit, regulate or abate acts, omissions, or conditions detrimental to the health, safety, and welfare of the people and to define and abate nuisances (including public health nuisances).

Hazard mitigation can be included under the police power to protect the public health, safety, and welfare; therefore counties and municipalities may include requirements for hazard mitigation in local ordinances. Municipal governments may also use their power to abate nuisances, which could include by local definition, any activity or condition making people or property more vulnerable to any hazard [NCGS Chapter 160A, Article 8 Delegation and Exercise of the General Police Power to Cities and Towns].

Building Codes and Building Inspection

Counties and municipalities can engage in risk reduction measures focusing on strengthening building codes and requiring retrofitting of existing structures and facilities to protect the public health, safety, and welfare in the event of a natural hazard.

North Carolina has a State mandatory building code, which applies throughout the State [NCGS 143-138 (c)]. However, local jurisdictions may adopt codes for their respective jurisdictions if approved by the State as providing “adequate minimum standards” [NCGS 1143-138 (e)]. Local regulations cannot be less restrictive than the State code. Exempted from the State code are public utility facilities other than buildings; liquefied petroleum gas and liquid fertilizer installations, and farm buildings outside municipal jurisdictions. No State permit may be required for structures under \$20,000. (Note that exemptions apply only to State, not local permits).

The State legislature has also empowered municipal governments to carry out building inspections. NCGS Chapter 160A, Article 19, Part 5 empower municipalities to create an Inspections Department, and enumerates its duties and responsibilities, which include enforcing State and local laws relating to the construction of buildings, installation of plumbing, electrical, heating systems, etc; building maintenance; and other matters.

Land Use

Through various land use regulatory powers, granted by the State, local governments can control the amount, timing, density, and location of new development. These growth characteristics can determine the level of vulnerability of an area in the event of a natural hazard. Land use regulatory powers include the power to engage in planning, enact and enforce zoning, subdivision, floodplain, stormwater and watershed ordinances.

Zoning

Zoning is the most basic tool available to control the use of land. The North Carolina General Statutes 160A-381 gives broad enabling authority for municipalities to use zoning as a planning tool. Counties may also regulate inside a municipal jurisdiction at the request of a municipality, as set forth in NCGS 160A-360(d). The statutory purpose for the grant of power is to promote the health, safety or the general welfare of the community. Land “uses” controlled by zoning include the type of use, such as residential, commercial, industrial, as well as minimum specifications for use such as lot size, building height, setback, density, etc.

Municipal governments are authorized to divide their territorial jurisdiction into districts, and to regulate and restrict the erection, construction, reconstruction, alteration, repair or use of buildings, structures, or land within those districts [NCGS 160A-382]. Districts may include general use districts, overlay districts, and special use districts or conditional use districts. Zoning ordinances consist of maps and written text.

Comprehensive or Master Planning

Within North Carolina, local governments are required to create or designate a planning agency in order to exercise the regulatory powers related to land use [NCGS 160A-387]. The planning agency may: prepare studies for an area/neighborhood; determine objectives; prepare and adopt plans for achieving objectives; develop and recommend policies, ordinances and administrative means to implement plans; and perform other related duties [NCGS 160A-361].

NCGS 160A-383 requires that zoning regulations be made in accordance with a comprehensive plan. While the ordinance itself may provide evidence that zoning is being conducted “in accordance with a plan,” the existence of a separate comprehensive planning document ensures that the government is developing regulations and ordinances that are consistent with the overall goals of the community.

Subdivision Regulation

Subdivision regulations control the division of land into parcels for the purpose of building a development or sale. Subdivision is defined as all divisions of a tract or parcel of land into two or more lots and all divisions involving a new street or a change in existing streets [NCGS 160A-376]. Flood-related subdivision controls typically require that developers install adequate drainage facilities and design water and sewer systems to minimize flood damage and contamination. They prohibit the subdivision of land subject to flooding unless flood hazards are overcome through filing or other measures, and they prohibit filling of floodway areas. Subdivision regulations require that subdivision plan be approved prior to the division of land. Subdivision regulation is limited in its ability to directly affect the type of use made of land or minimum specifications for structures.

Floodplain Regulation

The North Carolina legislature passed the “Act to Prevent Inappropriate Development in the One Hundred-Year Floodplain and to Reduce Flood Hazards” to regulate development within floodways [NCGS 143-214.51-214.61]. It serves as a risk reduction or risk elimination tool depending upon local government use. The purpose of this law is to minimize the extent of floods by preventing obstructions that inhibit water flow and increase flood height and damage; prevent and minimize loss of life, injuries, property damage and other losses in flood hazard areas; and promote the public health, safety, and welfare of citizens.

The statute directs, rather than mandates, local government to designate a one hundred-year floodplain; adopt local ordinances to regulate uses in flood hazard areas; enforce those ordinances; and grant permits for use in flood hazard areas that are consistent with the ordinance. The statute established minimum standards for local ordinances and provides for variances for prohibited uses such as:

(a) A flood hazard prevention ordinance adopted by a county or city pursuant to this part shall, at a minimum:

1. Meet the requirements for participation in the National Flood Insurance Program and of this section.
2. Prohibit new solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities in the 100-year floodplain except as noted in section (b) below.
3. Provide that a structure or tank for chemical or fuel storage incidental to a use that is allowed under this section or to the operation of a water treatment facility may be located in a 100-year floodplain only if the structure or tank is either elevated above base flood elevation or designed to be watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydro dynamic loads and the effects of buoyancy.

(b) A flood hazard prevention ordinance may include a procedure for granting variances for uses prohibited under G.S. 143-215.54.

(c) A county or municipality shall notify the Secretary of Crime Control and Public Safety of its intention to grant a variance at least 30 days prior to granting the variance. A variance may be granted upon finding that all of the following apply:

1. The use serves a critical need in the community.
2. No feasible location exists for the location of the use outside the 100-year floodplain.
3. The lowest floor of any structure is elevated above the base flood elevation or is designed to be watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy.
4. The use complies with all other applicable laws and regulations.

Also, the statute ensures that local ordinances meet the minimum requirements of participation in the National Flood Insurance Program (NFIP), which will afford residents the ability to purchase flood insurance through the NFIP. Additionally, communities with such ordinances will be afforded priority in the consideration of applications for loans and grants from the Clean Water Revolving Loan and Grant Fund.

Acquisition

Local governments can eliminate the risk of hazards through their power to acquire property, either in fee or lesser interest such as an easement. This removes the property from the private marketplace, thereby eliminating or reducing the possibility of inappropriate development. North Carolina legislation empowers municipalities to acquire property for public purpose by gift, grant, devise, bequest, exchange, purchase, lease or eminent domain [NCGS Chapter 160A Article 11].

Taxation

The power to levy taxes and special assessments has been delegated to municipal governments by the North Carolina legislature [NCGS 160A Article 9]. This power allows local governments to set preferential tax rates for areas unsuitable for development, such as wetlands, thereby discouraging development in hazardous areas. Local governments may also levy special assessments on property owners for all or part of the costs of acquiring, constructing, reconstructing, extending or otherwise building or improving beach erosion control, or flood and hurricane protection works within a designated area [NCGS 160A 238].

Spending

Counties and municipalities have been granted power to make expenditures in the public interest by the North Carolina General Assembly. An annual budget and a Capital Improvement Plan (CIP) can include hazard mitigation efforts. A CIP serves as a schedule for providing county or municipal services over a specified period of time. Committing to a timetable for the extension of facilities and services, local governments can effectively steer future growth and development and mitigate the impacts of natural hazards. The Town of Eastover does prepare an annual budget and does work closely with the Eastover Sanitary District in the provision of water and sewer services.

Fiscal Capability

The North Carolina General Assembly has empowered municipalities to make expenditures in the public interest [NCGS 160A 475]. The primary source for funding these expenditures comes from property taxes. These revenues generally finance critical services available and delivered on a daily basis. Examples of these services include: public utilities, solid waste management, emergency services, health and social services, and schools. The Town of Eastover does not have available funds to support special projects such as hazard mitigation activities. Eastover looks to the following sources for hazard mitigation funding:

Government Funding

Federal and State funds are available to local governments for the development and implementation of hazard mitigation plans. These sources are listed below.

Federal Funding

Hazard Mitigation Grant Program (HMGP) - This program provides funding for hazard mitigation measures following a Presidential disaster declaration. Even though the Federal government supplies the majority of the funds for this program, the program is administered on the State level. HMGP funds can be used for projects such as acquisition or relocation, retrofitting, development of local mitigation standards and comprehensive mitigation plans, structural hazard control and the purchase of equipment to improve preparedness and response.

Pre Disaster Mitigation Program Grants (PDM) - Pre Disaster Mitigation Program provides funding to States and local jurisdictions for cost-effective hazard mitigation actions. FEMA provides PDM grants to States, that in turn, provide sub-grants to local governments for mitigation activities such as planning and the implementation of projects identified through the evaluation of natural and man-made hazards.

Flood Mitigation Assistance Programs - This program (FMAP) furnishes mitigation assistance to States, local jurisdictions and individuals to reduce or eliminate the long-term risk of flood damage to the built environment and real property. FMAP is available on an annual basis and eligibility is based upon a jurisdiction participating in the National Flood Insurance Program and developing a mitigation plan. These funds may be used for elevation and/or dry flood proofing of structures, acquisition of real property, relocation or demolition of structures, as well as other minor structural projects.

National Flood Insurance Program - Participation in this risk-sharing program requires jurisdictions to adopt and enforce floodplain management ordinances designed to reduce future losses.

Buy-Out Programs - Funding is available to buy back floodplains, relocate residents, and demolish structures in order to eliminate or reduce payouts for recurring flood damage.

Earthquake Hazard Reduction Grants - These funds are available to States having a moderate or high risk of seismic activity.

Community Development Block Grants - The Community Development Block Grant (CDBG) is designed to assist counties and municipalities in rehabilitating substandard dwelling units and to expand economic opportunities, primarily for low-to-moderate income families. Additionally, as a result of a Presidential declared disaster, CDBG funds may be used for long-term needs such as acquisition, reconstruction, and redevelopment of disaster-affected areas.

Small Business Administration (SBA) Pre-Disaster Mitigation Loan Program - The purpose of this program is to make low-interest, fixed-rate loans to eligible small businesses for the purpose of implementing mitigation measures to protect business property from damage that may be caused by future disasters. The program is a pilot program, which supports the Federal Emergency Management Agency (FEMA) Pre-Disaster Mitigation Program.

Ability to Pay - The North Carolina Department of Commerce has ranked the 100 counties in an economic tier system due to the Lee Quality Jobs and Business Expansion Act of 1966, which provides for a sliding scale of State tax credits for economic investment. This Act has become North Carolina's primary development tool in an effort to assist smaller rural counties become economically competitive. The most economically depressed counties are ranked in Tier 1 and the most economically prosperous are ranked in Tier 5. These rankings are evaluated annually based on (1) population growth, (2) unemployment rate, and (3) per capita income.

The tier ranking is widely used by the State as a measure of an individual county's ability to pay when applying for State and Federal grants. Cumberland County is ranked as a Tier __ County.

Non-Government Funding

Another potential source of revenue for local mitigation efforts are the contribution of non-governmental organizations, such as churches, charities community relief funds, the American Red Cross, hospitals, for-profit businesses and non-profit organizations, such as nature conservancy and land trust organizations.

Technical Capability

The Town of Eastover has limited resources for technical staff. The Town relies on the following technical sources:

State and Federal Technical Assistance

Agencies such as the Federal Emergency Management Agency (FEMA) and the North Carolina Division of Emergency Management (NCDEM) have made available numerous implementation manuals and other resource documents. These manuals provide information on mitigation techniques for various hazards, including hurricanes, floods, wildfires, tornadoes and earthquakes. Additionally, they provide technical information on engineering principles, construction methods, costs and suggestions for how techniques can be financed and implemented. Federal agencies such as the U.S. Army Corps of Engineers and Soil Conservation Service also provide similar services.

Statewide Floodplain Mapping Initiative

The State of North Carolina, through the Federal Emergency Management Agency's Cooperating Technical Community partnership initiative, has been designated as a Cooperating Technical State (CTS). As a CTS, the State will assume primary ownership and responsibility for Flood Insurance Rate Maps (FIRM) for all North Carolina communities. This project includes conducting flood hazard analysis and producing updated digital FIRM maps.

The State has acquired raw elevation data for the six eastern river basins, Cape Fear, Lumber, Neuse, Pasquotank, Tar-Pamlico, and White Oak, which will be used to develop Digital Elevation Models (DEMs) update flood hazard data. The updated flood hazard data provides current, accurate information for local jurisdictions and property owners to make sound site planning and design decisions when building new structures and infrastructure and retrofitting existing structures.

Local Technical Assistance

Cumberland County has a geographic information system (GIS) that provides essential information and technology for hazard response and mitigation. The GIS system provides detailed data on property ownership, land use type and location, values of property and structures, location of the Special Flood Hazard Area and other infrastructure.

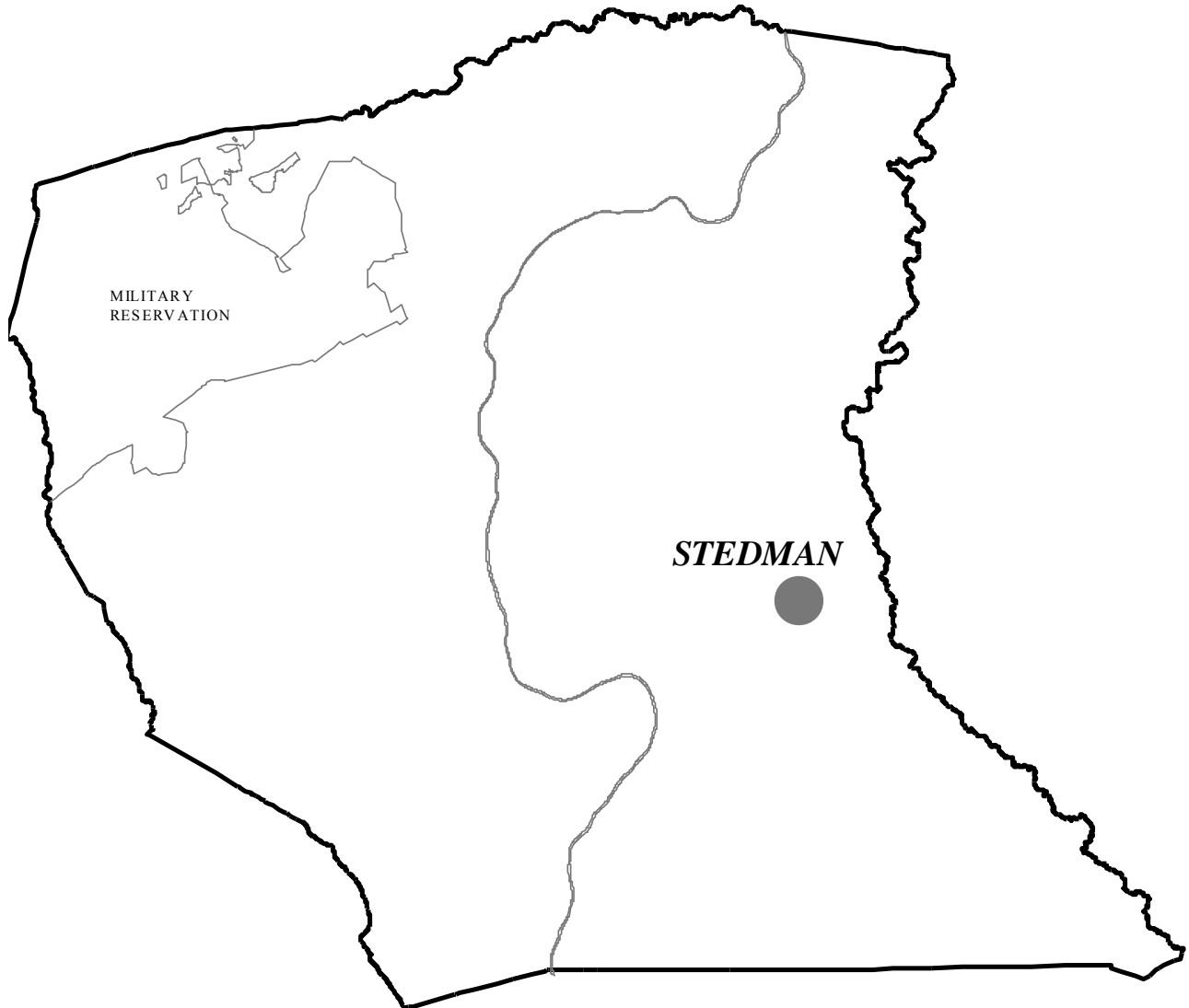
This system provides quick access and processing of detailed data that can be used to assist in deployment of resources, before, during and after a natural disaster, as well assists in planning for the mitigation of future disasters.

As previously mentioned in the Unincorporated Area Hazard Mitigation Plan Section entitled Local Departments, Agencies and Organizations, Eastover has access to a responsive and highly trained staff who are capable of implementing mitigation strategies, as well as educating the public about potential hazards and the process necessary to mitigate these hazards.

Political Capability

The Eastover Town Council is knowledgeable of the potential hazards faced by their respective jurisdictions, as well as past history of hazard events and recovery efforts. Additionally, the Cumberland County Joint Planning Board (serving Eastover) is aware of the importance of hazard mitigation planning. Due to this knowledge and understanding, the current and future political climates are expected to be favorable for supporting hazard mitigation strategies.

TOWN OF STEDMAN HAZARD MITIGATION PLAN



TOWN OF STEDMAN HAZARD MITIGATION PLAN

COMMUNITY PROFILE

The Town of Stedman, incorporated in 1913 is located in the eastern portion of the County along N. C. Highway 24 near the Sampson County line, consisting of approximately 1.67 square miles. It is a small Town consisting of an estimated 2009 population of 970 persons according to the North Carolina Office of Management and Budget. The topography is relatively flat and has a rural character. Local small private industry, retail trade and education are significant civilian employment opportunities in the Town. It has a Mayor-Council form of government consisting of a mayor and five commissioners. The chief administrative officer is the Town Administrator.

IDENTIFYING AND PROFILING HAZARDS

For this update the Technical Committee reviewed **Table A1 – Hazard Identification and Analysis and Table A2 – Summary by Hazard Vulnerability by Jurisdiction**. The Technical Committee determined the following hazards still could affect Stedman: hurricane, drought, thunderstorms, severe winter storms, tornadoes, extreme heat, wildfires, and earthquakes. Additionally, the Technical Committee focused on flooding since it is associated with and caused by other types of hazards, such as thunderstorms, hurricanes and tornadoes. Between January 1950 and June 2010, Stedman has experienced eight hurricanes, 9 powerful thunderstorms, one drought, 15 winter storms, two extreme heat events, two flash floods and three hail storms per NOAA history profile of Local Storm Events. It is highly likely that thunderstorms and extreme heat events will occur in the future. Additionally, it is likely that Stedman will experience hurricanes, tornadoes, hailstorms, droughts, and severe winter storms. Flooding, wildfires and earthquakes are possible. Tornadoes, flooding, wildfires, and earthquakes have not been documented within the Town during this time period. Detailed information on each hazard type and their profile are contained in Appendix A of the overall document.

MITIGATION STRATEGIES

The Town of Stedman adopted the three (3) goals developed by the Technical Committee to be accomplished by its Mitigation Plan. These goals were the basis for a more specific plan of action. The following goals are broad policy Statements aimed at guiding and directing future activity so that persons, property, government, and infrastructure are protected from the impacts of the natural hazards that affect Town of Stedman.

GOAL #1

Reduce vulnerability of Cumberland County and its municipalities to all natural hazards for existing development, future development, redevelopment and infrastructure.

GOAL #2

Identify and protect all properties/natural resources that are at risk of damage due to a hazard and to undertake cost-effective mitigation measures to minimize losses.

GOAL #3

Improve public awareness, education and outreach programs for the natural hazards that Cumberland County and its municipalities are most likely to experience.

Within the following pages, mitigation actions for the Town of Stedman are listed and will identify the following information for each action:

- Hazard targeted – *Hazard the action is targeted to mitigate.*
- Goals addressed – *Goal(s) the action will address.*
- Document reference – *Ordinance(s), Policies or Programs that the action references, if any.*
- Whether it would be a new policy or continuation or an amendment to an existing policy
- Priority – *Each action ranked in terms of overall importance (high, moderate or low). Priorities were based upon the following criteria: cost-benefit, hazard identification and profile, vulnerability and capability assessments, and mitigation goals.*
- Funding sources – *List of funding source or potential funding source*
- How the action will mitigate the hazard
- How the action will reduce overall vulnerability
- Will the action be:
 - Cost effective – *Is a measure of how well the cost achieves the intended action.*
 - Environmentally Sound – *Is a determination if technology exists within the financial means of the jurisdictions that can achieve an action.*
 - Technically feasible - *The action has minimal or no harm to nature or the environment.*
- On-going, Short-term or Long-term Implementation - *On-going actions are those that currently exist and should be continued. Short-term actions are those that can be implemented within existing resources and should be accomplished within a time frame of six (6) months to two (2) years. Long-term actions will take additional resources or authorities and should be organized to begin implementation within a time frame of 3-5 years.*
- Person(s) or department responsible for the action – *Person(s) or Department(s) responsible for implementing the action.*
- Benchmark and indicator of progress – *Explains what needs to be accomplishment to meet this action.*
- Update – *Explains what has or has not been done to this action.*

The Hazard Mitigation Technical Committee looked at all the actions from the original Plan and the Updated Plan and considered the jurisdiction's cost of the action to be taken and their cost if no action is taken. In most cases it was determined that it was far less costly for the jurisdictions to take preventive action whenever possible than wait until a hazard occurred, therefore most of the actions taken are more preventive in nature. Most of the jurisdictions have limited financial resources to establish capital projects that address existing facilities vulnerable to the various hazards, such as relocating, removing, purchasing vulnerable properties; providing public water, or placing electrical lines underground. The Hazard Mitigation Technical Committee determined that flooding was the most likely hazard to occur based on past records. Most of the past damage occurred on properties located in the Special Flood Hazard Area. Many of these properties are aged and through attrition and general decay will eventually be removed from the hazardous area. Preventive measures will keep new structures from being built in these areas.